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ABSTRACT

Introductions to menu planning I and II--including nutrition requirements for children of all ages--are the subjects of the first two lessons of this Food Service Training Manual. The menu planning system of lesson 3 deals with place and time, as well as with needs for eye appeal and contrast. Lesson 4 is a progress test with answer key for preceding lessons; lesson 5 describes menu types, and lesson 6 discusses customers' food preferences, including those of senior citizens. Menu planning and resource utilization are outlined in lesson 7, and lesson 8 is a second progress test. All but three lessons have detailed handout materials, and most define key words and list class activities, as well as references for more information. (KS)

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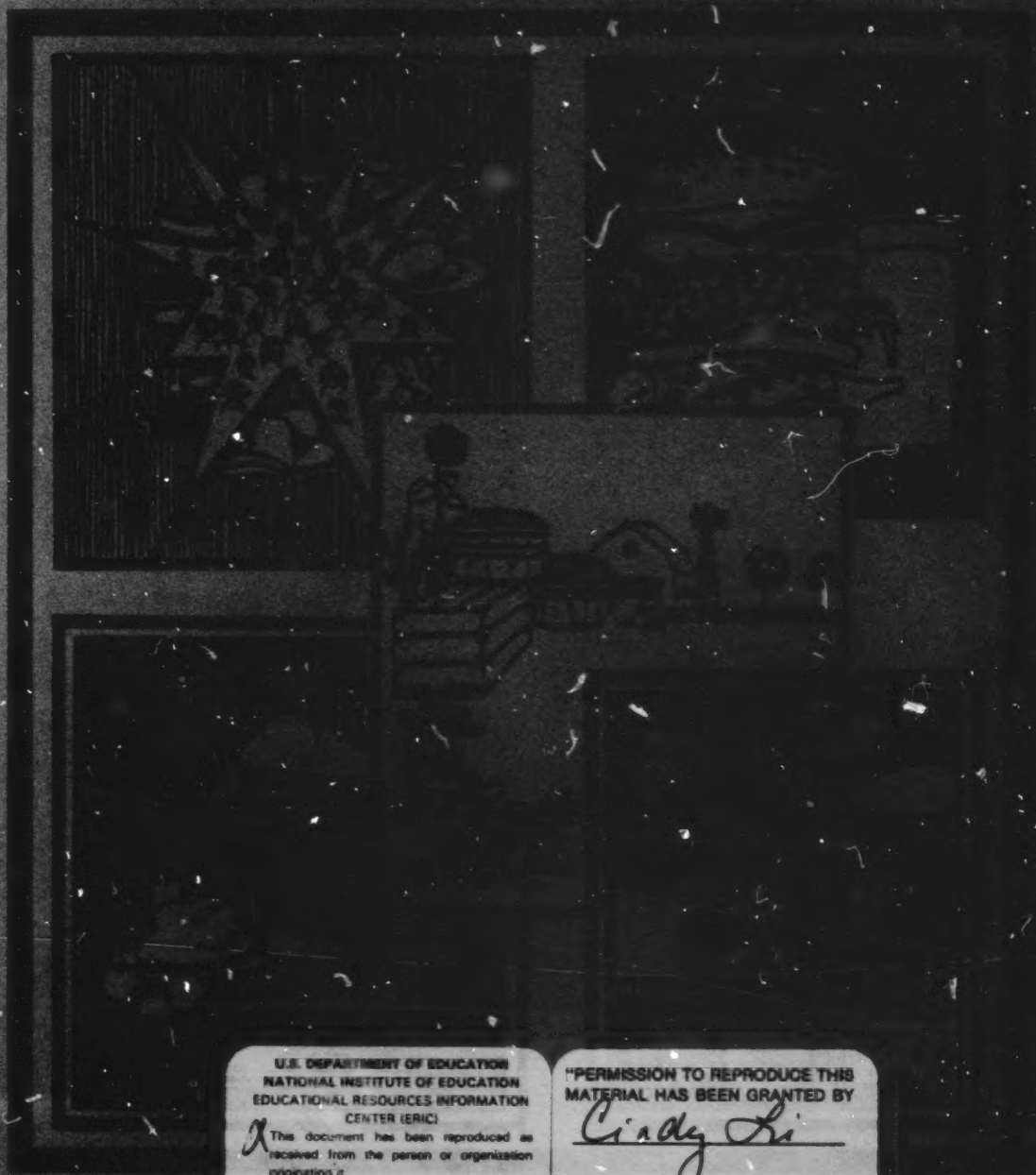
MENU PLANNING

Michigan School Food Service Institute Manual



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Lesson 1

INTRODUCTION TO MENU PLANNING I AND II

A. Goal of this lesson

The goal of this lesson is to explain the various Child Nutrition Meal Patterns (breakfast, lunch/supper, between meal supplements) and why menu planning is important, and necessary, to a successful foodservice program.

B. Purpose of this lesson

After completing this lesson the participants should be able to:

1. understand the terms "menu" and "meal pattern" as they apply to any child nutrition foodservice program (includes breakfast, lunch/supper and between meal supplements),
2. apply the 7 functions of a good menu when creating menus, and
3. construct menus following the appropriate meal pattern.

C. Instructor preparation for class activities

1. Duplicate sufficient copies of Handouts.
2. Obtain chalk board (plus chalk and eraser) or flip chart and marker.
3. Collect quantity recipes and menu ideas from sources such as USDA publications, American School Food Service Association and Michigan School Food Service Association publications, textbooks, magazines or information from food shows or food vendors.
4. Provide copies of a recent week's menu from a school for each participant for activities on p. 6.

D. Key words used in this lesson

Between Meal Supplement (or Snacks) Menu Pattern: The food plan designated by USDA for the National Child Nutrition Program. Designated amounts of milk, or full strength juice, fruit or vegetable, and bread, cereal, pasta or noodles are required.

Calorie (kilo calorie or K cal): A unit of heat. A calorie is not a substance but a measure of heat energy.

Menu: A list of foods available at each meal. The menu is the key to the entire foodservice operation because it determines other needs and is one of the factors that influences the acceptability of foods.

Non-reimbursable Meals: A meal that does not contain the required food items in the quantities specified in the USDA meal patterns and therefore cannot receive funds from the government.

Nutrient: A chemical substance in food that is needed for growth and health.

Nutrient Standard: Based on the Recommended Dietary Allowances (RDA) various standards for different aged persons are established. The RDA is considered the nutrient standard.

Recommended Dietary Allowances (RDA): One of the American food and nutritional standards. It is a list of nutrients and amounts of nutrients needed for given sex and age categories designed to meet the needs of most healthy Americans. It can be used to evaluate adequacy of diets of groups of people and therefore is applicable for the evaluation of school meals.

Reimbursable Meals: To be considered reimbursable, a meal must contain the required food items in the quantities specified in the USDA meal patterns and therefore funds can be obtained for its service.

School Breakfast Meal Pattern: The food plan designated by the USDA for the National Child Nutrition Program designated amounts of fluid milk, full strength juices, fruits or vegetables, and breads, cereals, pasta or noodles and is designed to provide approximately 1/4 of the Recommended Dietary Allowance for children.

School Lunch Meal Pattern (Revised from the Type A Lunch): The food plan designated by USDA for the National Child Nutrition Program. Designated amounts of meat or meat alternate, fruits, vegetables, bread or bread alternates and fluid milk when served together are designed to provide approximately 1/3 of the RDA for children. No actual nutritional requirements are included in the pattern. Food must be selected carefully to provide 1/3 of the RDA's.

E. References for additional information

1. Cronan, M. The School Lunch. C.A. Bennet Company, Inc. Peoria, Illinois. 1962. Out of print but available.
2. Food and Nutrition Board. Recommended Dietary Allowances. Ninth Edition. National Academy of Sciences/ National Research Council. Washington, D.C. 1980.
3. Van Egmond-Pannell, D. School Foodservice. Second Edition AVI Publishing Company. Westport, CT. 1980 ($17.00).
4. Deutsch, R.M. Realities of Nutrition. Bull Publishing Co. Palo Alto, CA. 1976.
5. Food Science and Human Nutrition. Michigan School Foodservice Training Manual: Nutrition. Michigan State University, E. Lansing, MI 48824, 1980. Available from Child Nutrition Programs, Michigan Department of Education, P.O. Box 30008, Lansing, MI 48909.
6. Food and Nutrition Service. Food Buying Guide for School Food Service. PA-1257 USDA. Government Printing Office, Washington, D.C. 20402, 1980.
7. Food and Nutrition Service. Planning Guide for Food Service in Child Care Centers (FNS-64), USDA, Government Printing Office, Washington, D.C. 20404, 1980.
8. Food and Nutrition Service. Menu Planning Guide for School Food Service. Program Aid #1260, USDA, Government Printing Office, Washington, D.C. 20402, 1980. May 1980 and Revised Pages, October, 1980, and Revised Pages, January, 1981.
9. Food and Nutrition Service. Food Buying Guide For Child Care Centers. U.S. Govt. Printing Office, Washington, D.C., 1978 ($1.70).
10. Food and Nutrition Service. 1977. Quantity Recipes for Child Care Centers. USDA. Washington, D.C. Includes 5 X 7" recipe cards for cereal products, desserts, main dishes, salads, sandwiches, soups, vegetables. Good resource even though information about the meal pattern is out of date.

LESSON I: MENU PLANNING I

LESSON CONTENT	CLASS ACTIVITY

A. Many abbreviations are used in a foodservice and are found in recipes, used in menu planning, and in the purchasing of foods. The most commonly used abbreviations include the following:

		EXAMPLE
AP	as purchased	26 lbs. AP
EP	edible portion	2 oz EP
AS	as served	3 oz AS
pkg	package	12 pkg
cs	case	6 per cs
tsp	teaspoon	1 tsp
Tbsp	tablespoon	3 Tbsp
lb. or #(after a number)	pound	4 lb or 4#
c or C	cup	1 c or 1 C
pt	pint	1/2 pt
qt	quart	2 qt
gal or G	gallon	4 gal or 4 G
oz	ounce	2 oz
fl oz	fluid ounce	8 fl oz
No.	number	No. 10 cans
#(before a number)	number	#10 can
wt	weight	
incl.	including	incl. syrup
excl.	excluding (without)	excl. syrup
/	per	10/case
w/ or $\bar{c}$	with	w/ syrup or $\bar{c}$ syrup
sl	slice	sl turkey
crax	crackers	soup w/crax
cn	can	1 cn
rst	roast	rst beef
w/o or $\bar{s}$	without	w/o syrup or $\bar{s}$ syrup
sc	sauce	ice cream w/sc

List the following items on the chalk board and ask each participant to write down in words exactly what each means.

1. 12-#303 cns/cs
2. 48-1/2 pts/carton
3. 3 oz EP
4. 10#AP/pkg
5. 6/#10 cn/cs
6. Sl Rst Beef
7. Sl ham w/sc
8. 1 Tbsp = 3 tsp
9. 16 Tbsp = 1 c
10. 16c = 1 G
11. 1 qt = 4 c
12. 1 qt = 32 fl oz
13. 8 fl oz = 1 c
14. 16 oz = 1#
15. 2 oz sl AS

LESSON CONTENT	CLASS ACTIVITY
B. Menu Planning is basic to a successful foodservice operation.	
1. Writing the menu is the first step.	
2. A good menu has several functions. It....	List the 7 functions of a good menu on a chalk board or flip chart, leaving space between each one. Ask participants to offer examples illustrating each of these, which can be written under each function listed. For example: Participation levels (function 2.b.) would be high if hamburger were served but might be much lower if ham loaf were on the menu.
a. provides a variety of nutritious foods. b. brings high participation by customers if acceptable to them. c. determines what foods to purchase. d. determines the use of USDA donated foods (commodities). e. reflects skills of personnel and determines staffing levels. f. utilizes available equipment. g. reflects cost controls as dictated by the budget.	
3. In planning menus it is important to....	
a. provide the required USDA meal pattern that is acceptable to customers and at optimum cost. b. provide a wide variety of foods to avoid boredom. c. consult student/parent/teacher advisory groups for new ideas or suggestions. d. make the best possible use of all resources such as the USDA publications, American School Food Service Association publications, text books, magazines and food shows.	Bring examples of resources listed in 3.d. (books, magazines, articles, recipes) to discuss with participants. Ask each to take one resource, spend 10 minutes reviewing it, and then tell fellow participants the ideas or suggestions found in that resource. Ask participants to bring one of their own resources to the next meeting to share.
4. Groups of foods and portions of foods from each group are included in the school menu patterns for specific reasons.	
a. The Recommended Dietary Allowances (RDA) is one <u>nutrient standard</u> used in the United States. The school menu patterns are <u>plans</u> to help assure every student eats food to meet the standard.	

LESSON CONTENT	CLASS ACTIVITY
b. The RDA is determined by nutritionists on the National Research Council. The RDA's are used as guidelines when planning diets for groups of people and they should meet the nutritional needs of most healthy Americans. c. The nutritional goal of the school lunch pattern is to provide approximately 1/3 of the RDA for each child each day. d. The goal for the school breakfast pattern is to provide about 1/4 of the RDA for each child each day. e. The RDA is updated about every 5 years. Be sure to use the most recent edition.	Using HANDOUT #1-1, Mean Heights and Weights and Recommended Energy Intake, underline the energy needs (K cal) for the age groups of children you feed in your school. Discuss the differences in caloric requirements for each group served. Using HANDOUT #1-2, Recommended Dietary Allowances, underline the nutrient requirements for the age group of children you serve at your school. Notice the differences in nutrients between girls and boys in the same age group. Using this chart answer the questions together on HANDOUT #1-3 so that every participant is able to read and use this chart.
5. Because not all foods in a given food group have exactly the same nutrients, children may not be served 1/3 of the RDA even when the school lunch menu pattern is followed. a. Many studies done over the past 10 years have shown that school lunches were sometimes deficient in calories, magnesium, iron, vitamin B-6, vitamin A, thiamin, vitamin B-12 and calcium. This points out one of the problems with the present school menu patterns, and may be the information that will lead to a new type of menu pattern based more on a nutrient basis in the future.	Using a recent week's menu from your school, circle the items on your menus that are listed on HANDOUT #1-4 called "Sources of Often Missed Nutrients." Discuss whether some items on your menu should be changed to add more of these missing foods to your menu. Using HANDOUT #1-5, circle the column that indicates the portions for the aged children you serve in your school. Discuss any changes this new pattern may have that will affect your school and your customers.

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LESSON CONTENT	CLASS ACTIVITY
b. To help assure that all lunches meet the desired nutritional goal, it is recommended that lunches include: - a Vitamin A vegetable or fruit at least twice a week - a Vitamin C vegetable or fruit at least 2 or 3 times a week - several foods for iron each day. Sources of these vitamins will be discussed in Lesson 3 and in the School Food Service Training Manual, Nutrition.	The components of the school lunch patterns for various aged children are listed in HANDOUT #1-5. Read through it together as a class noting the comments and requirements listed on HANDOUT #1-6. HANDOUTS #1-7 through 1-9 and 1-12, plus attachments 2 and 4 are concerned with Child Care Programs and are implemented by Child Care Food Program Consultants, School Support Services, Department of Education, Lansing, Michigan. Discuss acceptable bread equivalents using HANDOUTS #1-10, 1-11 (1-12). Use the correct menu pattern on HANDOUT #1-5 to evaluate the incorrect high school menus on HANDOUT #1-13. Check answers with comments at the bottom of handout.

HANDOUT #1-1

MEAN HEIGHTS AND WEIGHTS AND RECOMMENDED ENERGY INTAKE*

1980 RECOMMENDED DIETARY ALLOWANCES FOR ENERGY

Age and Sex Group	Weight		Height		Energy		
					Needs		Range in
	kg.	lb.	cm.	in.	MJ	kcal	kcal
Infants							
0.0-0.5 yr.	6	13	60	24	kg. x 0.48	kg. x 115	95- 145
0.5-1.0 yr.	9	20	71	28	kg. x 0.44	kg. x 105	80- 135
Children							
1-3 yr.	13	29	90	35	5.5	1,300	900-1,800
4-6 yr.	20	44	112	44	7.1	1,700	1,300-2,300
7-10 yr.	28	62	132	52	10.1	2,400	1,650-3,300
Males							
11-14 yr.	45	99	157	62	11.3	2,700	2,000-3,700
15-18 yr.	66	145	176	69	11.8	2,800	2,100-3,900
19-22 yr.	70	154	177	70	12.2	2,900	2,500-3,300
23-50 yr.	70	154	178	70	11.3	2,700	2,300-3,100
51-75 yr.	70	154	178	70	10.1	2,400	2,000-2,800
76 + yr.	70	154	178	70	8.6	2,050	1,650-2,450
Females							
11-14 yr.	46	101	157	62	9.2	2,200	1,500-3,000
15-18 yr.	55	120	163	64	8.8	2,100	1,200-3,000
19-22 yr.	55	120	163	64	8.8	2,100	1,700-2,500
23-50 yr.	55	120	163	64	8.4	2,000	1,600-2,400
51-75 yr.	55	120	163	64	7.6	1,800	1,400-2,200
76 + yr.	55	120	163	64	6.7	1,600	1,200-2,000
pregnancy						+300	
lactation						+500	

* From Recommended Dietary Allowances, Revised 1980, Food and Nutrition Board. National Academy of Sciences--National Research Council, Washington, D.C. The data in this table have been assembled from the observed median heights and weights of children, together with desirable weights for adults for mean heights of men (70 in.) and women (64 in.) between the ages of eighteen and thirty-four years as surveyed in the U.S. population (DHEW/NCHS data).

HANDOUT #1-2

SELECTED 1980 RECOMMENDED DIETARY ALLOWANCES
Designed for the maintenance of good nutrition of practically all healthy people in the U.S.A.

FOOD AND NUTRITION BOARD, NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

age and sex group	weight		height		protein	fat-soluble vitamins		water-soluble vitamins		minerals	
	kg.	lb.	cm.	in.		vitamin A	vitamin D	vitamin C	thiamin	calcium	iron
					gm.	R.E.	µg.	mg	mg	mg	mg
Infants											
0.0-0.5 yr.	6	60	60	24	kg. x 2.2	420	10	35	0.3	360	10
0.5-1.0 yr.	9	71	71	28	kg. x 2.0	400	10	35	0.5	540	15
Children											
1-3 yr.	13	29	90	35	23	400	10	45	0.7	800	15
4-6 yr.	20	44	112	44	30	500	10	45	0.9	800	10
7-10 yr.	28	62	132	52	34	700	10	45	1.2	800	10
Males											
11-14 yr.	45	99	157	62	45	1,000	10	50	1.4	1,200	18
15-18 yr.	66	145	176	69	56	1,000	10	60	1.4	1,200	18
19-22 yr.	70	154	177	70	56	1,000	7.5	60	1.5	800	10
23-50 yr.	70	154	178	70	56	1,000	5	60	1.4	800	10
51 + yr.	70	154	178	70	56	1,000	5	60	1.2	800	10
Females											
11-14 yr.	46	101	157	62	46	800	10	50	1.1	1,200	18
15-18 yr.	55	120	163	64	46	800	10	60	1.1	1,200	18
19-22 yr.	55	120	163	65	44	800	7.5	60	1.1	800	18
23-50 yr.	55	120	163	64	44	800	5	60	1.0	800	18
51 + yr.	55	120	163	64	44	800	5	60	1.0	800	10
pregnancy					+ 30	+ 200	+ 5	+ 20	+ 0.4	+ 400	
lactation					+ 20	+ 400	+ 5	+ 40	+ 0.5	+ 400	

If the thiamin requirement is met it is likely that riboflavin and niacin are adequate. Further information about recommended dietary allowances can be found in nutrition textbooks and journals.

The allowances are intended to provide for individual variations among most normal persons in the United States.

Diets should be based on a variety of common foods in order to provide other nutrients.

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HANDOUT #1-3

USE OF THE RDA (Recommended Dietary Allowances) CHART TO DETERMINE NUTRIENT NEEDS

1. A 10 year old boy requires _____ µg. of vitamin D.
2. A 6 year old girl requires _____ mg. of vitamin C;
   a boy requires _____ mg.
3. Does an 11 year old boy require more or less vitamin A than an 11 year old girl?
   Yes No
4. The vitamin C requirement for boys and girls age 15 is the same.
   True False
5. The vitamin C requirement does not change for children from age 1 to 10 years.
   True False
6. An 11 year old girl requires twice the amount of vitamin A as a 3 year old girl.
   True False

Answer Key

1. 10 µg
2. 45 mg, 45 mg
3. Yes
4. True
5. True
6. True

HANDOUT #1-4

SOURCES OF OFTEN MISSED NUTRIENTS

Missed Nutrients	Food Sources
IRON:	Egg yolk Dark green leafy vegetables Pork liver Liver from other animals Meats Whole grain and enriched cereal and bread products
VITAMIN A:	Egg yolk Fortified milk Liver Cheese
CAROTENE:	Deep yellow fruits and vegetables Dark green and leafy vegetables Carotene can be converted with the body to vitamin A.
VITAMIN C:	Citrus fruits Cantaloupe Broccoli Green pepper Tomatoes Cabbage
MAGNESIUM:	Green leafy vegetables Dry peas and beans Nuts Whole grain cereals and breads Liver
THIAMIN:	Meat, especially pork Whole grain and enriched bread and cereal products
VITAMIN B-6:	Meat Poultry Fish Whole grain cereals Bananas Egg yolks
VITAMIN B-12:	Plant foods do not contain vitamin B-12 unless fortified Liver Meat Poultry Fish Milk

HANDOUT #1-5

SCHOOL LUNCH PATTERNS FOR VARIOUS AGE/GRADE GROUPS (USDA 1980)

FOOD COMPONENTS	MINIMUM QUANTITIES				RECOMMENDED
	Group I ages 1-2	Group II ages 3-4	Group III ages 5-8	Group IV age 9 & over	Group V age 12 & over
	PRESCHOOL		(Grade K-3)	(Grade 4-12)	(Grade 7-12)
MEAT AND MEAT ALTERNATES (1)*					
A serving of one of the following or a combination to give an equivalent quantity:					
Lean meat, poultry, or fish(AS) or cheese	1 oz	1 1/2 oz	1 1/2 oz	2 oz	3 oz
Large Egg(s)	1	1 1/2	1 1/2	2	3
Cooked dry beans or peas	1/2 C	3/4 C	3/4 C	1 C	1 1/2 C
Peanut Butter	2 T	3 T	3 T	4 T	6 T
VEGETABLE AND/OR FRUIT (2)					
Two or more servings of vegetable or fruit, or both to total this amount.	1/2 C	1/2 C	1/2 C	3/4 C	3/4 C
BREAD OR BREAD ALTERNATE (3)					
A serving is: 1 slice of whole-grain or enriched bread, or 1 whole-grain or enriched biscuit, roll or muffin, or 1/2 C cooked whole-grain or enriched rice, macaroni, noodles, whole-grain or enriched pasta, or other cereal grains such as bulgur or corn grits, or a combination of any of the above.	5 per week	8 per week	8 per week	8 per week	10 per week
MILK (4)					
A serving of fluid, unflavored lowfat milk	3/4 C	3/4C	1/2 pt	1/2 pt	1/2 pt

*See notes on following page for specific requirements for each food group.
Data from: Menu Planning Guide, May, 1980.

HANDOUT #1-6

COMMENTS AND REQUIREMENTS FOR SCHOOL LUNCH PATTERNS

USDA recommends, but does not require that you adjust portions by age/grade group to better meet the food and nutritional needs of children according to their ages. If you adjust portions, Groups I through IV are minimum requirements for the age/grade groups specified. If you do not adjust portions, the Group IV portions are the portions to serve all children. It is the one meal pattern which will satisfy all requirements if no portion size adjustments are made.

Group V specifies recommended, not required, quantities for students 12 years and older. These students may request smaller portions, but not smaller than those specified in Group IV.

(1) - Must be served as the main dish or the main dish and one other menu item.
- Textured vegetable protein products, cheese alternate products, and enriched macaroni with fortified protein may be used to meet part of the meat/meat alternate requirement. Fact sheets on each of these alternate foods give detailed instructions for use.
- The amount you must serve of a single meat alternate may seem too large for the particular age group you are serving. To make the quantity of that meat alternate more reasonable, use a smaller amount to meet part of the requirement and supplement with another meat or meat alternate to meet the full requirement.

(2) - No more than one-half of the total requirement may be met with full-strength fruit or vegetable juice.
- Cooked dry beans or peas may be used as a meat alternate or as a vegetable but not as both in the same meal.

(3) - At least 1/2 serving of bread or an equivalent quantity of bread alternate for Group I, and 1 serving for Groups I through V must be served daily.
- Enriched macaroni with fortified protein may be used as a meat alternate or as a bread alternate but not as both in the same meal. (Food Buying Guide for School Food Service, PA-1257 provides the information for the minimum weight of a serving. Handout #1-11 also lists acceptable bread equivalents.)

(4) - Unflavored lowfat milks include all lowfat types, skim and buttermilk.
- This requirement does not prohibit offering other milks, such as whole milk or flavored milk, along with one or more of the lowfat types indicated.

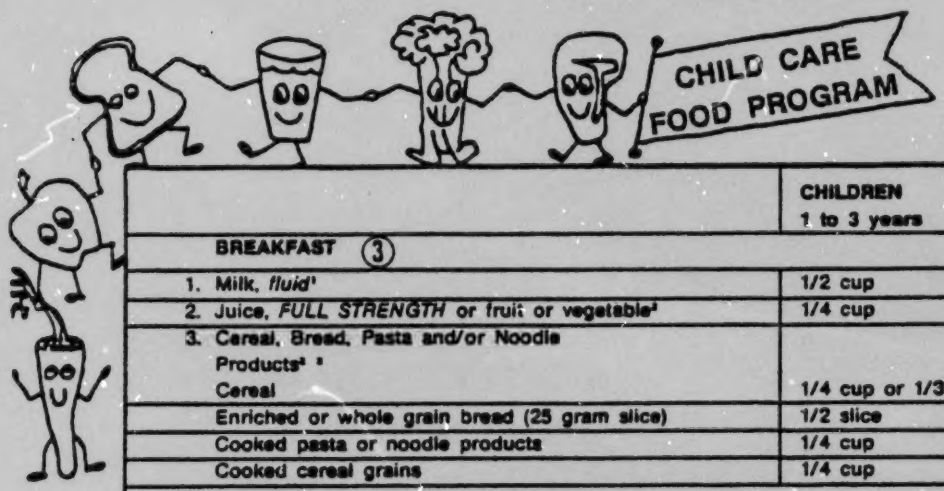
Data from: Menu Planning Guide, May 1980

NOTE: For participants involved in day care feeding programs, refer to USDA publication "A Planning Guide for Food Service in Child Care Centers" (FNS-64) 1980.

HANDOUT #1-7

MEAL REQUIREMENTS

CHILD CARE FOOD PROGRAM



	CHILDREN 1 to 3 years	CHILDREN 3 to 6 years	CHILDREN 6 to 12 years[1]
BREAKFAST (3)			
1. Milk, *fluid*[1]	1/2 cup	3/4 cup	1 cup
2. Juice, *FULL STRENGTH* or fruit or vegetable[2]	1/4 cup	1/2 cup	1/2 cup
3. Cereal, Bread, Pasta and/or Noodle Products[2] [3]			
Cereal	1/4 cup or 1/3 oz.	1/3 cup or 1/2 oz.	3/4 cup or 1 oz.
Enriched or whole grain bread (25 gram slice)	1/2 slice	1/2 slice	1 slice
Cooked pasta or noodle products	1/4 cup	1/4 cup	1/2 cup
Cooked cereal grains	1/4 cup	1/4 cup	1/2 cup
MID-MORNING OR MID-AFTERNOON SNACK (SUPPLEMENT) ***2 OUT OF 4 OF THE FOLLOWING COMPONENTS MUST BE SERVED***		(2 OUT OF 4)	
1. A serving of *fluid* milk[1]	1/2 cup	1/2 cup	1 cup
2. Bread, Cereal, Pasta and/or Noodle Products[2] [3]			
Enriched or whole grain bread (25 gram slice)	1/2 slice	1/2 slice	1 slice
Cereal	1/4 cup or 1/3 oz.	1/3 cup or 1/2 oz.	3/4 cup or 1 oz.
Cooked pasta or noodle products	1/4 cup	1/4 cup	1/2 cup
Cooked cereal grains	1/4 cup	1/4 cup	1/2 cup
3. Meat and/or Meat Alternate[2] [4]			
Lean meat, poultry, fish, cooked, and/or cheese	1/2 oz.	1/2 oz.	1 oz.
Eggs	1/2 egg	1/2 egg	1 egg
Cooked dry beans or peas	1/8 cup	1/8 cup	1/4 cup
Peanut butter	1 tbsp.	1 tbsp.	2 tbsp.
4. Juice, FULL-STRENGTH, or fruit, or vegetable[2]	1/2 cup	1/2 cup	3/4 cup
NOTE: Juice & Milk *CANNOT* be served together to meet Snack Requirement			
LUNCH OR SUPPER (5)			
1. Milk, *fluid*[1]	1/2 cup	3/4 cup	1 cup
2. Meat and/or Meat Alternate[2] [4]			
Lean meat, poultry, fish, cooked, and/or cheese	1 oz.	1-1/2 oz.	2 oz.
Eggs	1	1	1
Cooked dry beans and peas	1/4 cup	3/8 cup	1/2 cup
Peanut Butter	2 Tbsp.	3 Tbsp.	4 Tbsp.
3 & 4. Vegetable and/or fruits[2] [5]	1/4 cup	1/2 cup	3/4 cup
5. Bread, Cereal, Pasta and/or Noodle Products[2] [3]			
Enriched or whole grain bread (25 gram slice)	1/2 slice	1/2 slice	1 slice
Cooked pasta or noodle products	1/4 cup	1/4 cup	1/2 cup
Cooked cereal grains	1/4 cup	1/4 cup	1/2 cup

[1]As purchased, *FLUID*, whole, low fat skim, skim, cultured buttermilk and flavored *milk*.

[2]Or an equivalent quantity of any combination.

[3]Or an equivalent serving of cornbread, biscuits, rolls, muffins, and similar products of *enriched* or *whole grain meal or flour*. (Cookies made of whole grain or enriched flour may be served for supplement only). See *Alternates for Bread and/or Cereal Requirements*.

[4]Cooked lean meat without bone or breading or 1-2 ounces of cheese, or 1 egg, or 1-4 tablespoons of peanut butter.

[5]Must include TWO fruits; or TWO vegetables or one fruit and one vegetable, to equal the amount shown in the chart.

From: Michigan Department of Education, Food and Nutrition Program
P.O. Box 30008, Lansing, MI 48909

HANDOUT #1-8

INFANT REQUIREMENTS

CHILD CARE FOOD PROGRAM

	CHILDREN 0 to 4 months	CHILDREN 4 to 8 months	CHILDREN 8 months to 1 year
BREAKFAST			
1. Infant Formula, Iron Fortified	4-6 oz.	6-8 oz.	6-8 oz.*
2. Infant Cereal, Iron Fortified	–	1-3 tbsp.	2-4 tbsp.
SUPPLEMENTAL FOODS			
1. Infant Formula, Iron Fortified,	4-6 oz.	2-4 oz.	2-4 oz.
fluid milk or full-strength		(formula, juice	
fruit juice		only)	
2. Enriched or whole grain crusty bread or cracker-type product suitable for infants			
Bread (25 gram slice)	–	0-1/4 slice or	0-1/4 slice or
Cracker Product	–	0-2 crackers	0-2 crackers
LUNCH OR SUPPER			
1. Infant Formula, Iron Fortified	4-6 oz.	6-8 oz.	6-8 oz.*
2. Infant Cereal, Iron Fortified	–	1-2 tbsp.	2-3 oz. fruit
			juice plus
			3-4 tbsp. fruit
			veg., and/or
			cereal
3/4. Strained, chopped, or mashed fruit and/or vegetable	–	1-2 tbsp.	Component included in cereal above
5. Strained meat, fish, poultry or egg yolk	–	0-1 tbsp.	1-4 tbsp.
cheese or	–	0-1/2 oz.	1/2-2 oz.
cottage cheese, cheese food or spread	–	0-1 oz.	1-4 oz.

*Or 6-8 ounces of fluid whole milk and 0-3 ounces of full-strength fruit juice

From: Michigan Department of Education, Food and Nutrition Program, 1980.

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HANDOUT #1-9

CHILD CARE FOOD PROGRAM REMINDERS

I. FOOD

A. MILK REQUIREMENTS

Fluid milk as purchased must be used for the milk requirement in the Child Care Food Program meal pattern.

Reconstituted dry or evaporated milk cannot be used for the required milk component in breakfast, lunch, and/or supper, nor for the optional component in the between-meal supplement.

Fluid milk includes whole, 2%, low fat, skim, buttermilk, and flavored milk.

Chocolate drink is not milk, thus, cannot be used.

Dry milk and evaporated milk can only be used in cooking.

B. SOUP REQUIREMENTS

One cup of the canned soups listed below must be served to meet the 1/4 cup vegetable/fruit requirement. If less soup than one cup is served per child, enough vegetables must be added so 1/4 cup of vegetables is available for each child:

Bean	Minestrone	Vegetable
Clam Chowder	Pea	Vegetable w/ other basic components
Tomato	Vegetarian vegetable	

One and one-half cups of bean, lentil, or split pea soup must be served to meet the 3/8 cup dry bean requirement. If less than one and one-half cup is served, another source of protein, such as cheese, must be served to ensure each child is served the equivalent of 1½ ounces of protein.

Canned chicken noodle soup as well as the soups listed below DO NOT count for either the vegetable/fruit requirement or the protein requirement. They do not count as anything, and can only be used as an extra food. If beef or chicken is added, the meat counts and the amount added must be 1½ ounces per serving.

Beef (with vegetables and barley)	Chicken with Rice
Home Style Chicken Noodle	Consomme
Chicken Gumbo	Celery (Cream of)
Beef Noodle	Chicken (Cream of)
French Onion	Mushroom (Cream of)

Homemade soups containing 1½ ounces of meat (or meat alternate) per serving meet the protein requirement. Homemade soups containing ¼ cup of vegetables per serving meet half of the vegetable/fruit requirement.

C. OTHER

Only FULL STRENGTH JUICE can count as the required component in the Child Care Food Program meal pattern. Hi-C fruit drinks, Kool-Aid, etc. DO NOT Count.

Cupcakes, cake, ice cream, popcorn are among others that DO NOT count as a required component in the between-meal supplement.

II. RECORDKEEPING

A. A & B Meals

Children whose Child Care fee is paid by the Department of Social Services are NOT automatically in Category A. You must document, i.e., have a signed family size and income statement for each child whose meals you are claiming in Categories A & B. (See Attachment #4.) The Department of Social Services' statement allowing Department of Social Services payment is NOT adequate. Department of Social Services uses different eligibility criteria than USDA, consequently you must have family size and income data to protect you against over-claim.

B. Receiving Advanced Payments requires extra bookkeeping. You MUST keep records of your reconciliation of each Advance to its respective claim so it is known whether your Agency owes the CCFP or the CCFP owes your Agency.

C. Accurate cash receipts records MUST be maintained.

D. Proper supporting documentation MUST be maintained for all cash disbursements.

E. ACTUAL COSTS incurred MUST be reported on Claim (not amount of bills that happened to be paid during the month, and NOT an estimated amount).

F. Correct and complete meal count records must be recorded each meal time. TIER-Count of children and count of adults (program and non-program) participating in meal service. ACTUAL-Count of children by Category (Meal Attendance) and count of adults (program and non-program) participating in meal service.

G. DO NOT report costs paid for by another source, such as CETA or Head Start, on the CCFP Claim.

H. Keep on file for three (3) years following the end of the fiscal year to which they pertain:

1. CCFP Application
2. CCFP Agreement and Policy Statement (Attachment #2)
3. IRS documentation of tax exempt status
4. DSS License
5. All FS&I forms for A & B children
6. Meal records
7. Claims, workpapers, and documentation for all figures on Claim

I. Check Claim for mathematical and clerical ERRORS.

Prepared by Zoe Slagle, 1980

Michigan Department of Education
Food and Nutrition Program
P.O. Box 30008
Lansing, Michigan 48909

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Attachment #4

For Child Care Centers and Outside School Hours Programs

Prototype: Family Size — Family Income Data Sheet

INSTRUCTIONS: Blank out printing above double line. Insert institution's name, address, and telephone number. When form is returned, circle appropriate category. Retain in records for 3 years following the fiscal year to which it pertains.

A B C (circle one)

INSTRUCTIONS FOR PARENT: Return ONE completed copy to address indicated above.

CHILD CARE FOOD PROGRAM

Dear Parent:

The opportunity for your child to receive nutritious meals and snacks from the new Child Care Food Program (Public Law 95-627) should not be missed. Your cooperation is vital to qualify for this program. Please help maintain quality nutrition on a regular basis for your child while she/he is receiving day care. The following information is necessary in order for your child to participate.

Names and ages of children in family (first and last) using day care site:

_____ | _____ | _____ | _____

INSTRUCTIONS: 1. Look at the following chart.
2. Circle "Family Size" — the number of ALL adults *and* children in family.
3. Circle your gross income* group under "Category A, B, or C" *on same line* as your family size
4. Write in yearly income under chart.

**Total family gross income before deductions;* include wages of all working members of the family, welfare payments, pensions, social security and all other income. Use income for past 12 months OR current monthly income multiplied by 12.

FAMILY GROSS INCOME (YEARLY)

Family Size	Category A	Category B	Category C
1	0 - $ 5,230	$ 5,231 - $ 8,150	$ 8,151 - and above
2	0 - 6,900	6,901 - 10,760	10,761 - and above
3	0 - 8,580	8,581 - 13,380	13,381 - and above
4	0 - 10,250	10,251 - 15,990	15,991 - and above
5	0 - 11,930	11,931 - 18,600	18,601 - and above
6	0 - 13,600	13,601 - 21,220	21,221 - and above
7	0 - 15,280	15,281 - 23,830	23,831 - and above
8	0 - 16,950	16,951 - 26,440	26,441 - and above
Each additional family member add: $ 1,680		$ 1,681 - $ 2,610	$ 2,611 - and above

*Gross Yearly Income: $___ _____

Deliberate misrepresentation of information subjects the applicant to prosecution under applicable State and Federal penal statutes.

I hereby certify that all of the above information is true and correct.

Signature of Parent or Guardian _____ Date _____

Complete Address _____ Telephone _____

THIS INFORMATION IS CONFIDENTIAL AND WILL NOT BE USED FOR ANY OTHER PURPOSE.

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ATTACHMENT 2

Michigan Department of Education
School Support Services
Food and Nutrition Program
Box 30008, Lansing, Michigan 48909

Please direct questions regarding this form to:
Zoe Slagle
(517) 373-7391

AGREEMENT

CHILD CARE FOOD PROGRAM

(19 ____ - 19____ Fiscal Year)

SPONSORING ORGANIZATION	Legal Name of Institution	Telephone (AC/Local No.)	County	Agreement No. (To be filled in by State)
	Address	City	Zip Code	Program Approval Date

MAILING INSTRUCTIONS: Return TWO copies to the STATE address indicated above.

When this agreement is approved by the STATE, a copy will be returned to you which will reflect your Agreement Number.

In order to effectuate the purpose of Section 17 of the National School Lunch Act and Child Nutrition Act of 1966, as amended by P.L. 95-627, enacted November 10, 1978, and the regulations governing the Child Care Food Program issued thereunder (7 CFR Part 226) (hereinafter referred to as the "Program"), the Michigan Department of Education (hereinafter referred to as the "State Agency") and the Institution whose name and address appear above, acting on behalf of each center and/or home listed in this Agreement, covenant and agree as follows:

THE STATE AGENCY AGREES THAT, to the extent of funds available, it shall reimburse the Institution in connection with meals served to children at the centers and/or homes listed in the Application during the period hereinafter stated. During any fiscal year, the amount of reimbursement for meals on behalf of each center shall not exceed the lesser of: (1) an amount equal to the number of meals, by types, served to children, multiplied by the rates assigned by the State Agency or such other rate as may be subsequently assigned by the State Agency, or (2) total food service program operating costs less cash income. Homes will be paid a per meal rate established by USDA. When the Institution wishes to claim only, any element or elements of operating costs, the reimbursement for meals on behalf of each site shall not exceed the lesser of: (1) an amount equal to the number of meals, by types, served to children, multiplied by the rates assigned by the State Agency or such other rate as may be subsequently assigned by the State Agency, or (2) cost of any element or elements of operating costs. The State Agency reserves the right to impose program size limitations on an Institution, based on program size, staffing patterns, program experience and organization.

THE INSTITUTION REPRESENTS AND WARRANTS THAT (1) the Child Care Centers, Outside School Hours Centers and/or Family and/or Group Day Care Homes listed in the Application have delegated authority for the operation of their food service to the Institution, and (2) it is a nonprofit agency that has tax exempt status under the Internal Revenue Code of 1954, or has filed a letter of application for tax exempt status under that section with the IRS; or participates in another Federal Program which requires nonprofit status; (3) all Child Care Centers, Outside School Hours Centers and/or Family and/or Group Day Care Homes listed in the Application are licensed/registered by the State of Michigan; and provide organized child care for children in a nonresidential nonschool situation; (4) it accepts financial and administrative responsibility for the operation of the food service in each Center and Family and Group Day Care Home listed in the Application; (5) each Center listed in the Application is a public institution or has tax exempt status under the Internal Revenue Code of 1954, or is moving toward compliance, or participates in another Federal Program which requires the nonprofit status; and (6) in order to qualify for reimbursement under this Agreement, in conducting the food service in the sites listed, it will:

1. Operate a nonprofit food service using all of the income therefrom solely for the operation or improvement of such service, except such income shall not be used to purchase land, to acquire or construct buildings; or to make alterations of existing buildings;
2. Serve meals which meet the minimum nutritional requirements specified in Attachment 1, or if a food service management company serves the meals, ascertain that it fulfills the terms of this agreement;
3. Maintain all management and financial responsibility for food service in each participating Child Care Center and Family and/or Group Day Care Home under its jurisdiction;
4. Sign a written Policy Statement ascertaining method of complying with regulations concerning meal service to children regardless of income category, race, sex, color, religion or national origin;
5. Collect family-size income information on enrolled children in A and B Categories at all centers listed in this Agreement to determine the number of enrolled children from families meeting the State Agency's family-size income standard for free and reduced price meals (Categories A, and B. See Attachment #4) (Not necessary if claiming only in Category C.);

6. Certify that all sites have the capacity and the facilities for meal service planned for number of children anticipated to be served;
7. Claim reimbursement for the types of meals provided to children at the rates specified by the State Agency;
8. Submit claims for reimbursement in accordance with procedures established by the State Agency;
9. Maintain, in the storage, preparation and service of food, proper sanitation and health standards in conformance with all applicable State and local laws and regulations;
10. Purchase, in as large quantities as may be efficiently utilized in the Program, the foods designated as plentiful by the State Agency;
11. Maintain necessary facilities for storing, preparing and serving food;
12. Maintain full and accurate records of the Program, as prescribed by the State Agency, and, if the Institution contracts with a food service management company for the preparation, delivery, or service of meals, ensure that the books and records pertinent to the contract will be fully and accurately maintained by the food service management company. All the aforementioned records shall be maintained for a period of three years from the date of submission of the final Claim for Reimbursement and shall be available for inspection or audit by the State Agency, USDA, USDA Office of Inspector General and the General Accounting Office at a reasonable time and place;
13. Follow procurement procedures required in Section 226.23 of the Regulations if contracting with a food service management company to provide meals, or components of such meals; and to remain responsible for seeing that the feeding operation is in conformity with this Agreement (See section concerning contracts) and when contracting for any services;
14. Provide adequate supervisory and operational food service personnel and hold training sessions for them for overall monitoring and management of each food service operation, including adequate personnel to visit all food service programs. The minimum monitoring requirement is as follows:
    Home — FOUR (4) reviews (documented) per year per home.
    Centers — THREE (3) reviews (documented) per year per center.
15. Upon request, make all accounts and records pertaining to the Program available to the State Agency, USDA, USDA Office of Inspector General, and the General Accounting Office for audit or administrative review at a reasonable time and place.

The Institution assures the State Agency that it now complies with, and shall in the future comply with, all requirements imposed by or pursuant to the Civil Rights Act of 1964 and the nondiscrimination regulations of the USDA, as now or hereafter amended (7 CFR Part 15), to the end that no person in the United States shall, on the grounds of race, sex, color, religion or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under the Program of activity of the Institution to which assistance is provided by the State Agency; and if an Institution obtains and insures compliance with such act and regulations at each of the child care centers and family and group day care homes listed in the Application, the Institution understands that this nondiscrimination provision applies to admissions and recruitment policies. Financial assistance under this Agreement is extended in reliance on the representation made herein as to nondiscrimination. (This nondiscrimination assurance shall obligate the Institution as long as assistance is provided by the State Agency. In case of failure of the Institution to comply with this nondiscrimination assurance, the United States has the right to seek its enforcement by judicial or other means.)

1. THE STATE AGENCY AND INSTITUTION MUTUALLY AGREE THAT: Hereinafter, listed centers, outside school hours centers, and/or homes approved by the State Agency, and the number of Centers, Outside School Hours Centers and/or Homes which have been accepted, shall be a part of this Agreement;
2. Centers and/or homes may be added or deleted as the need arises, and the references herein shall be deemed to include such a schedule as supplemented and amended;
3. No Member or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this Agreement or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this Agreement if made with a corporation for its general benefit;
4. For the purpose of this Agreement, the following terms shall mean, respectively:
    a. *Child Care Center:* Means any licensed nonschool public or private nonprofit organization providing day care services where children are not maintained in a permanent residence, including, but not limited to, day care centers, settlement houses, recreation centers, Head Start centers, and organizations providing day care services for handicapped children. It can be an Institution or participate in the program under the auspices of another Institution.
    b. *Children:* Means persons (1) 18 years of age and under who are enrolled for care in an Institution participating in the Child Care Food Program; (2) mentally or physically handicapped, as defined by the State, over 18 years of age, enrolled in an Institution serving a majority of children 18 years of age and under.
    c. *Family and Group Day Care Homes:* Means a licensed/registered organized day care program in a private home under the auspices of an Institution.
    d. *Fiscal Year:* Means a period of twelve calendar months beginning with October 1 of any calendar year and ending with September 30 of the following calendar year.
    e. *Institution:* Means a Sponsoring Organization, Child Care Center or Outside-School Hours Care Center which enters into an agreement with the State Agency to assume final administrative and financial responsibility for Program operation.

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f. *Meal:* Means food which is served to children which meets the minimal nutritional requirements stipulated in this Agreement.

g. *Milk:* Means pasteurized fluid types of unflavored or flavored whole milk, low-fat milk, skim milk or cultured buttermilk which meet State standards for such milk, except that in the meal pattern for infants "milk" means unflavored types of whole fluid milk or an equivalent quanitity of reconstituted evaporated milk which meets such standards.

Skim or low-fat milk must be fortified with 2,000 I.U. of Vitamin A per quart and 400 I.U. of Vitamin D per quart according to levels for milk fortified in Michigan. Flavored milk must be the standard for whole milk to which flavoring has been added. The butterfat level for such milk will range between 2.7 and 3.0 percent.

h. *Net Food Service Program Operating Cost:* Means the entire net cost of providing meals to program children (Cost-Income = Net Cost)

Remaining terms used in this Agreement have the same meaning as set forth in Section 226.2.

5. This Agreement shall be effective with respect to meals served commencing the *1st day of October*. The State Agency may renew this Agreement, by notice in writing given to the Institution, for such period as funds are available for carrying out the Program. The State Agency's Agreement to reimburse the Institution is contingent upon the continued availability of funds appropriated for Child Care Food Program purposes in a sufficient amount, and no legal liability on the part of the Government for the payment of any money shall arise unless and until such appropriations shall have been provided.
6. This Agreement may be terminated on the part of either party hereto, and the State Agency may terminate this agreement immediately after receipt of evidence that the terms and conditions of this Agreement and of the regulations governing the Program have not been fully complied with by the Institution. Any termination of this Agreement by the State Agency shall be in accord with Section 226.27 of the regulations. No termination or expiration of this Agreement, however, shall affect the obligation of the Institution to maintain and retain records and to make such records available for audit.
7. Any materials developed by an Institution may be freely copied and used by other CCFP Institutions and/or the State Agency.
8. The terms of this Agreement shall not be modified or changed in any way other than by the consent in writing of both parties hereto.

RECORDKEEPING REQUIREMENTS

The Institution must keep full and accurate records respecting its food service to serve as a basis for the Claim for Reimbursement and for audit and review purposes. These records must be kept for 3 years after the end of the fiscal year to which they pertain. The records to be kept include the following:

1. **Documentation:**
   a. Copies of Applications submitted to the Agency.
   b. Copies of licenses issued by State of Michigan.
   c. Copies of U.S. Internal Revenue Service tax-exempt certification or application or documentation of participation in another federally funded program which requires nonprofit status (private Institutions only).
   d. Copy of management plan and budget approved by the State Agency. (Multi-site Sponsors only)
   e. Income Data of those children whose families fall in Categories A and B. (See Attachment #4).
   f. Documentation of visits to Child Care Centers and/or Family and Group Day Care programs to monitor compliance (Multi-side Sponsors only).

   MINIMUM REQUIREMENT: Homes — FOUR (4) reviews (documented) per year per home.
   Centers — THREE (3) reviews (documented) per year per center.

   g. Payments to Child Care Centers and Family and Group Day programs (Multi-side Sponsors).
   h. Free and reduced price meal policy statement. (Attachment #2)
2. **Meals:**
   a. Daily number of meals served to children, by type and category. Actual Claim *OR*
   b. Daily number of meals served to children by type. Tiering Claim.
   c. Daily number of meals served to program adults, by type.
   d. Daily number of meals served to nonprogram adults, by type.
3. **Food Service Program Income (Receipts):**
   a. Children's Payments.
   b. Adults' payments.
   c. Donated monies.
4. **Food Service Program Operating Costs: OR Cost of any Element or Elements Of Operating Costs**
   a. Administrative Costs
   b. Food Costs
   c. Direct labor costs
   d. Non-food costs
   e. Indirect costs
   f. All other expenditures

REQUIREMENTS FOR MEALS

1. Sponsoring Organizations participating in the program shall serve one or more of the following types of meals.
   a. Breakfast
   b. Lunch
   c. Supper
   d. Supplemental food served between other meals
2. Except as otherwise provided in this schedule, each meal shall contain, as a minimum, the indicated food components and amounts listed in Attachment #1.
3. If emergency conditions prevent a site normally having a supply of fluid milk from temporarily obtaining delivery thereof, the State Agency may approve reimbursement for breakfasts, lunches, or suppers served without fluid milk during the emergency period, provided, however, that an equivalent amount of canned, whole dry, or nonfat dry milk is used in preparation of the components of all meals.
4. Substitutions may be made in required meal pattern if individual participating children are unable, because of medical or other special dietary needs, to consume such foods. Such substitutions shall be made only when supported by a statement from a recognized medical authority which includes alternate foods.

CONTRACTS BETWEEN SPONSORING ORGANIZATIONS, FOOD SERVICE MANAGEMENT COMPANIES, MANAGEMENT COMPANIES, AND OTHER CONTRACTUAL SERVICES

1. An Institution that so employs a food service management company, management company, or otherwise contracts for services, shall remain responsible for seeing that the feeding operation and/or any other operation is in conformity with its agreement with the State Agency;
2. The Institution shall provide the food service management company with a list of approved program participants and shall update the list as needed;
3. The food service management company, management company, or other contracted persons shall maintain such records (supported by invoices, receipts, or other evidence) as the Institution will need to meet its responsibilities in Section 226.22 of the Child Care Food Program, and shall report thereon to the Institution promptly at the end of each month;
4. The food service management company shall have State or Local health certification and shall ensure that all health and sanitation requirements are met at all times;
5. The books and records of the food service management company, and other contractors pertaining to the Institution's feeding operation shall be available for a period of 3 years from the date of submission of the final Claim for Reimbursement for inspection and audit by representatives of the State Agency, of USDA, USDA Office of Inspector General, and the United States General Accounting Office at any reasonable time and place;
6. The requirements of Section 226.21 of the Child Care Food Program established by Section 17 of the National School Lunch Act, as amended by Public Law 95-627, enacted November 10, 1978, shall be met for all meals;
7. Unitized meals or meal components shall be delivered in accordance with a delivery schedule prescribed in the contract;
8. Increases and decreases in the number of meal orders may be made by the Institution daily within a period of prior notice mutually agreed upon;
9. No payment shall be made for meals that do not meet nutritional requirements, are spoiled or unwholesome at the time of delivery, or do not otherwise meet the requirements of the contract;
10. Menus meeting the specified meal requirements in Section 226.21 of the Child Care Food Program shall be an integral part of each contract;
11. Remedies for nonperformance shall be stipulated in each contract;
12. A copy of the contract between Institution and food service management company, management company, or other contractors *must* accompany this Agreement in order for approval to be granted by the State Agency. (See Attachment #6).

SIGNATURE ON BEHALF OF INSTITUTION

By _____ (Signature)

Title _____

Date _____

MICHIGAN DEPARTMENT OF EDUCATION

By _____

Title Food and Nutrition Supervisor

Date _____

MSU-NET
FSHN/80

HANDOUT #1-10

POLICY STATEMENT ABOUT VARIOUS FOOD EQUIVALENTS

A. Graham crackers may be used to meet the bread/bread alternate requirement for lunch in the Child Care Food Program but not in the National School Lunch Program. They were withdrawn from the NSLP due to their relatively high sugar content and it is possible that they may in the future not be credited in the CCFP as a bread/bread alternate at lunch.

B. Fresh coconut cannot be used to meet the fruit/vegetable requirement in the National School Lunch Program or the Child Care Food Program.

C. Peanuts cannot be used to fulfill the meat/meat alternate requirement for lunch or for supplements in the Child Care Food Program or for lunch in the National School Lunch Program.

D. At present, yogurt is not credited as a replacement for fluid milk in the National School Lunch Program or the Child Care Food Program. The United States Department of Agriculture task force is currently considering the issue of allowing yogurt as a replacement for "fluid milk" in Child Nutrition Programs.

E. In the National School Lunch Program and the Child Care Food Program with regard to breast milk, a meal is reimbursable if at least one additional component is supplied by either the Provider or the foodservice authority. The reimbursement may not exceed the cost of the lunch. The United States Department of Agriculture is definitely interested in encouraging breastfeeding by mothers involved in USDA programs.

The same would be true with donated food, i.e., if banana bread was donated by a parent for a snack, the snack could be claimed if the Provider or foodservice authority supplied milk.

Prepared by Argelio B. Perez, 10/80
Michigan Department of Education

HANDOUT #1-11

GUIDELINES FOR ITEMS TO BE CREDITED AS BREAD EQUIVALENTS

USDA's Food and Nutrition Service has issued guidelines for items which can be credited as bread equivalents in USDA meals. Acceptable items must still use whole grain or enriched meal or flour and other cereal flours as the primary ingredient and served as the bread item in the meal. Non-creditable Items are sweet-type foods such as cakes, cookies, pies, etc. that are served as desserts as well as other extrued and/or shaped grain items such as hard, thin pretzels and corn chips.

Products are grouped according to solid content, grain content and moisture.

Bread and Bread Equivalents

Group I -- Weights Should Equal at Least 13 gms or 1.5 Ounces

Items	Serving Size[1]	Approximate Weight		
		Grams	Ounces	Per Unit
Bagels	1/2 bagel	20	.7	
Biscuits	1 serving	28	1.0	
Boston Brown Bread	1/2 serving	24	.85	
Buns (all types)	1/2 bun	15	.55	
Cornbread	1 serving	28	1.0	
Doughnuts (all types)[2]	1/2 doughnut	16	.55	
English Muffins	1/2 muffin	20	.7	
French or Vienna Bread[3]	1/2 serving	15	.5	
"Fry" Bread	1/2 piece	16	.55	
Italian Bread[3]	1/2 serving	14	.5	
Muffins	1 muffin	40	1.4	
Pretzels, Dutch (Soft) Twisted	1 pretzel	8	.3	Pretzel
Pumpernickel	1/2 slice	14	.5	
Raisin Bread	1/2 slice	12.5	.45	
Rolls (all types)	1/2 roll	14	.5	
Rye Bread	1/2 slice	12.5	.45	
Salt Sticks	1/2 stick	12.5	.45	
Stuffing (Bread)	1/2 serving			1/2 cup
Syrian Bread (Flat)[3]	1/2 section	12.5	.45	
White Bread	1/2 slice	12.5	.45	
Whole Wheat Bread	1/2 slice	12.5	.45	

[1] The number of items per portion are approximate amounts. Additional quantities may be needed to provide the appropriate weight for this group depending on the size of the item used.

[2] To be allowed as a bread item only in the School Breakfast Program.

[3] Denotes commercially prepared products often made with unenriched flour. Check label or manufacturer to be sure product purchased is made with enriched flour.

Prepared by: Jean McFadden, Extension Specialist
Food Service Management
Dept. Food Science & Human Nutrition
Michigan State University

Bread and Bread Equivalents

Group II — Weights Should Equal at Least 10 gms or 0.4 Ounces

Items	Serving Size[1]	Approximate Weight Grams	Ounces	Per Unit
Bread Sticks (Dry)	1 1/2 sticks	3.5	.1	stick
Graham Crackers	1 1/2 sections	3.5	.1	cracker
Melba Toast	2 1/2 pieces	2	.05	piece
"Pilot" Bread	1 piece	8	.3	piece
Rye Wafers (Whole-Grain)	2 wafers	2.5	.1	wafer
Saltine Crackers	4 crackers	1.4	.05	cracker
Soda Crackers	1 1/2 crackers	3.5	.1	cracker
Taco Shells	1 shell	5	.2	shell
Zwieback	1 1/2 pieces	3.5	.1	piece

Group III — Weights Should Equal at Least 15 gms or .6 Ounces

Items	Serving Size[1]	Approximate Weight Grams	Ounces	Per Unit
Dumplings	1/2 dumpling	22.5	.8	
Hush Puppies	1/2 serving	15	.55	
Meat/Meat Alternate Pie Crust	1/2 serving	15	.55	
Meat/Meat Alternate Turnover Crust	1/2 serving	21	.75	
Pancakes	1/2 pancake	25	.9	
Pizza Crust	1/2 serving	15	.55	
Popovers	1/2 popover	25	.9	
Sopapillas	1/2 serving	15	.55	
Spoonbread	1/2 serving	15	.55	
Tortillas	1 tortilla	12.5	.45	tortilla

[1]The number of items per portion are approximate amounts. Additional quantities may be needed to provide the appropriate weight for this group depending on the size of the item used.

[2]To be allowed as a bread item only in the School Breakfast Program.

[3]Denotes commercially prepared products often made with unenriched flour. Check label or manufacturer to be sure product purchased is made with enriched flour.

Revised regulations in 1980 have added the following items as fulfilling the bread requirement:

Cooked enriched or whole-grain rice, macaroni, noodles and other pasta products (1/2 cup portion). (Enriched macaroni products with fortified protein may be used as part of a Meat Alternate or as a Bread Alternate but not as both food components in the same meal.)

Prepared by: Jean McFadden, Extension Specialist
Food Service Management
Dept. Food Science & Human Nutrition
Michigan State University

HANDOUT #1-12

ALTERNATIVES FOR THE BREAD AND/OR CEREAL REQUIREMENT FOR THE CHILD CARE FOOD PROGRAM

All Products Must be Made with WHOLE GRAIN or ENRICHED Flour or Meal

Group I

Serving Size specified below should have a minimum weight of 13 grams (0.5 ounce).

Item	Common Serving Size That Usually Equals 13 Grams (MUST serve a minimum of 13 grams)
Bagels	1/2 bagel
Biscuits	1 biscuit
Boston Brown Bread	1/2 serving
Buns (all types)	1/2 bun
Cookie[5]	1 serving (18 grams)
Cornbread[1]	1 serving
Doughnuts (all types)[2]	1/2 doughnut
English Muffin	1/2 muffin
French or Vienna Bread	1/2 serving
"Fry" Bread	1/2 piece
Italian Bread[3]	1/2 serving
Muffins[1]	1/2 muffin
Pretzels, Dutch (soft) Twisted	1 pretzel
Pumpernickel	1/2 slice
Raisin Bread[1]	1/2 slice
Rolls (all types)[1]	1 roll
Rye Bread	1/2 slice
Salt Sticks	1/2 stick
Stuffing (bread)[4]	1/2 serving
Sweet Rolls[2]	1/2 roll
Syrian Bread (flat)[3]	1/2 section
White Bread[1]	1/2 slice
Whole Wheat Bread[1]	1/2 slice

GROUP II

The serving size specified below should have a minimum weight of 10 grams (0.4 ounces)

Item	Common Serving Size That Usually Equals 10 Grams (Must serve a minimum of 10 Grams)
Bread Sticks (dry)	1 1/2 sticks
Graham Crackers	1 1/2 crackers
Melba Toast	2 1/2 pieces
"Pilot" Bread	1 piece
Rye Wafers (whole grain)	2 wafers
Saltine Crackers	4 crackers
Soda Crackers	1 1/2 crackers
Taco Shells	1 shell
Zwieback	1 1/2 pieces

[1] To determine serving sizes for products made at child care centers, refer to "Cereal Products" in FNS 86, "Quantity Recipes for Child Care Centers." See Reference List.

45 [2] To be allowed as a bread item in breakfasts and supplements (snacks) only. 01 46

[3] Denotes commercially prepared products often made with unenriched flour. Check label or manufacturer to be sure product purchased is made with enriched flour.

[4] Bread in a serving of stuffing should weigh at least 13 grams (0.5 ounce).

[5] Snack only. Weight exception to this group - must be 18 grams.

HANDOUT #1-12, continued

GROUP III

The serving size below should have a minimum weight of 15 grams (0.6 ounces)

Item	Common Serving Size That Usually Equals 15 Grams (MUST serve a minimum of 15 grams)	
Dumplings	1/2 dumpling	
Hush Puppies	1/2 serving	
Meat or Meat Alternate Pie Crust	1/2 serving	
Meat or Meat Alternate Turnover Crust	1/2 serving	
Pancakes	1/2 pancake	Children
Pizza Crust	1/2 serving	1 to 6 years
Popovers	1/2 popover	
Sopapillas	1/2 serving	
Spoonbreads	1/2 serving	
Tortillas	1 tortilla	
Waffles	1/2 serving	

GROUP IV

The serving size is determined as a COOKED portion.

Item	Common Serving Size That Usually Equals 13 Grams (MUST serve a minimum of 13 grams)
Bulgur	1/4 cup
Corn Grits	1/4 cup
Dry Cereal (breakfast only)	1/3 cup or 1/2 ounce
Lasagne Noodles	1/4 cup
Macaroni[1]	1/4 cup
Noodles (egg)	1/4 cup
Rice	1/4 cup
Spaghetti	1/4 cup
Farina	1/4 cup

[1]Enriched macaroni products with fortified protein may be counted as meeting either the bread requirement or the meat requirement but not both in the same meal.

Prepared by: Zoe Slagle, MDE, 9/1980

Michigan Department of Education
Food and Nutrition Program
P.O. Box 30008
Lansing, MI 48909

HANDOUT #1-13

INCORRECT HIGH SCHOOL MENU

Directions:

Using information on HANDOUT #1-5, correct these menus to meet requirements for a recommended high school menu pattern

	MENU	SERVING SIZE
Monday	Tuna Salad	2 oz.
	Potato Chips	1/2 cup
	Fresh Vegetable Sticks	1/2 cup
	Fresh Orange	1
	Milk	1/2 pint
Tuesday	Oven Baked Chicken	wing
	Baked Potatoes	1
	Broccoli	1/2 cup
	Bread and Butter	1 slice
	Fruit Whip-Gelatin	3/4 cup
	Milk	1/2 pint
Wednesday	School Made Pizza	large piece
	Sliced Bananas	1/2 cup
	Milk	1/2 pint
Thursday	Turkey and Gravy over	2 oz.
	Mashed Potatoes	1/2 cup
	Sliced Tomatoes	1/2 cup
	Roll and Butter	1 roll
	Chilled Peaches over	1/2 cup
	Ice Cream	1/2 cup
Friday	Swedish Meatballs on	3 oz.
	Broad Noodles	1/2 cup
	Buttered Asparagus	1/2 cup
	Blueberry Muffin	1
	Apple	1
	Milk	1/2 pint

Answer Key

ERRORS IN HANDOUT #1-13 - HIGH SCHOOL MENU PATTERN

ENTREES - Portion error on Monday (tuna salad), Tuesday (chicken wing), Thursday (turkey). Pizza on Wednesday would have to have specific meat and cheese ingredient amounts in order to be acceptable.

VEGETABLES AND FRUITS - Wednesday is short one portion of fruit or vegetable.

BREAD AND ALTERNATES - 10 slices or alternates required per week. Only 5 are included on this menu. There are many ways that these menus could be altered in order to be acceptable. Some ideas might include:

1. change potato chips on Monday to bread sticks,
2. change mashed potatoes on Thursday to bread stuffing,
3. offer double portions of bread sticks, sliced bread or muffins
4. serve graham crackers with dessert on Thursday, or
5. serve double portion (1c) of noodles on Friday.

Lesson 2

INTRODUCTION TO MENU PLANNING II

A. Goal of this lesson

The goal of this lesson is to explain the various Child Nutrition Meal Patterns (breakfast, lunch/supper, between meal supplements) and why menu planning is important, and necessary, to a successful foodservice program.

B. Purpose of this lesson

After completing this lesson the participants should be able to:

1. understand the terms "menu" and "meal pattern" as they apply to any child nutrition foodservice program (includes breakfast, lunch/supper and between meal supplements),
2. apply the 7 functions of a good menu when creating menus, and
3. construct menus following the appropriate meal pattern.

C. Instructor preparation for class activities

1. Duplicate sufficient copies of handouts.
2. Make poster if necessary, page 26 .

D. Key words used in this lesson

Between Meal Supplement (or Snacks) Menu Pattern: The food plan designated by USDA for the National Child Nutrition Program. Designated amounts of milk, or full strength juice, fruit or vegetable, and bread, cereal, pasta or noodles are required.

Calorie (kilo calorie): A unit of heat. A calorie is not a substance but a measure of heat energy.

Menu: A list of foods available at each meal. The menu is the key to the entire foodservice operation because it determines other needs and is one of the factors that influences the acceptability of foods.

Non-reimbursable Meals: A meal that does not contain the required food items in the quantities specified in the USDA meal patterns and therefore cannot receive funds from the government.

Nutrient: A chemical substance in food that is needed for growth and health.

Nutrient Standard: Based on the Recommended Dietary Allowances (RDA) various standards for different aged persons are established. The RDA is considered the nutrient standard.

Recommended Dietary Allowances (RDA): One of the American food and nutritional standards. It is a list of nutrients and amounts of nutrients needed for given sex and age categories designed to meet the needs of most healthy Americans. It can be used to evaluate adequacy of diets of groups of people and therefore is applicable for the evaluation of school meals.

Reimbursable Meals: To be considered reimbursable, a meal must contain the required food items in the quantities specified in the USDA meal patterns and therefore funds can be obtained for its service.

School Breakfast Meal Pattern: The food plan designated by the USDA for the National Child Nutrition Program designated amounts of fluid milk, full strength juices, fruits or vegetables, and breads, cereals, pasta or noodles and is designed to provide approximately 1/4 of the Recommended Dietary Allowance for children.

School Lunch Meal Pattern (Rev[illegible] from the Type A Lunch): The food plan designated by USDA for the National Child Nutrition Program. Designated amounts of meat or meat alternate, fruits, vegetables, bread or bread alternates and fluid milk when served together are designed to provide approximately 1/3 of the RDA for children. No actual nutritional requirements are included in the pattern. Food must be selected carefully to provide 1/3 of the RDA's.

E.[1] References

1. USDA. Menu Planning Guide for School Food Service. PA 1260, 1980. (See references list, Lesson 1.)

2. Kolasa, K. and Lackey, C. Michigan School Breakfast Survey, 1978-1979. Michigan Department of Education, Lansing, MI 48909, or Michigan Agricultural Experiment Station, East Lansing, MI 48824

3. Food Science and Human Nutrition. Michigan School Foodservice Training Manual: Introduction to School Foodservice Michigan State University, East Lansing, MI 48824, 1980. Available from Child Nutrition Programs, Michigan Dept. of Education, P.O. Box 30008, Lansing, MI 48[illegible].

E.2 References for Additional Information

(Starred references are considered most helpful and are free upon request from the Michigan Dept. of Education, Child Nutrition Programs, P.O. Box 3008, Lansing, MI 48909.

1. Cronan, M. The School Lunch, Charles A. Bennett Company, Inc., Peoria, IL, 1962. (Out of print, but available)

*2. Food and Nutrition Service. A Menu Planning Guide for School Food Service. Program Aid #1260, USDA. U.S. Government Printing Office. Washington, D.C., 1980.

3. Food and Nutrition Service. A Planning Guide for Food Service in Child Care Centers. FNS-64, USDA. U.S. Government Printing Office. Washington, D.C. 1980.

4. Food and Nutrition Service. Quantity Recipes for Type A School Lunches, PA - 631. USDA, 1977. Out of print.

5. Van Egmond-Pannel, D. School Food Service. Second Edition, AVI Publishing Co., Westport, CT, 1974.

6. Food and Nutrition Service. Information Sheet: Acceptable Textured Vegetable Protein Products. USDA. U.S. Government Printing Office, Washington, D.C., 20402, 1980.

7. Food and Nutrition Service. Information Sheet: Acceptable Enriched Macaroni Products with Fortified Protein. USDA. U.S. Government Printing Office, Washington, D.C. 20402, 1980.

8. Food and Nutrition Service. Information Sheet: Acceptable Cheese Alternate Products. USDA. U.S. Government Printing Office, Washington, D.C. 20402, 1980.

9. Food and Nutrition Service 1976. School Breakfast Menu Planning Guide. FNS 7 USDA. U.S. Govt. Printing Office, Washington, D.C.

LESSON 2: MENU PLANNING II

LESSON CONTENT	CLASS ACTIVITY
A. "Offer versus Serve" - An alternative to the set meal pattern 1. By definition, "offer versus serve" means that junior high/middle or high school students are given the opportunity to select only the foods from the regular school lunch meal pattern which they intend to eat. This option to the traditional set meal pattern became effective on June 3, 1976. It recognizes that students who are at middle, junior and senior high school level have a special independent nature and an ability to exercise choice in their selection of foods. Providers of USDA lunches are charged with the task of providing these students with meals that they will not only accept, but want to consume. Such a task requires imagination, skill, and hard work. Careful forecasting needs, based upon acceptability of offered foods can assure that foods are not wasted either on the students' plates, or as a result of over-production. 2. The New National School Lunch Meal Pattern a. The new meal pattern which replaces the Type A pattern has 5 food components: Main Dish (1 1/2 - 3 oz of meat and/or alternate) Fruit and/or vegetable (3/8 cup) Vegetable and/or fruit (3/8 cup) Bread or equivalent (1 slice) Fluid milk (1/2 pint) b. Students must choose one food from at least 3 of 5 food components on this list. However, all 5 components must be offered on a daily basis so that the choice of 5 is always there. Butter and fortified margarine are no longer required as a component of the required meal pattern. c. It should be noted that the "offer vs. serve" meal format can be used with all 3 kinds of menu patterns including no-choice,	Review questions and answers about "offer versus serve". See HANDOUT #2-1. Make or obtain poster on "offer versus serve," HANDOUT #2-1.

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LESSON CONTENT	CLASS ACTIVITY
alternate choice and choice. However, currently regulations require "offer vs serve" in senior high schools, but leaves the decision to local school food authorities for junior high/ middle schools, and does not allow it to be offered in elementary schools. (Menu Planning Guide for School Food Service, PA 1260, 1980.) d. The main dish in many cases is made up of one to three meal components (such as stew). However, at no time may more than 2 be counted as meeting part of the 5 required meal components. e. Reimbursement is described in the Michigan School Foodservice Training Manual: Introduction to School Food Service. 3. Pricing with "Offer Versus Serve" a. The established price of your set lunch meal must be charged regardless of how many components the students choose: three, four or five. b. A la carte pricing must be structured to account for the possibility that students will select a 3 component lunch. The main dish a la carte items should be priced no less than 5 cents below your established set meal price. For example: Consider the following set meal which sells for 75¢ - Hamburger on Bun, Green Beans, Sliced Pears, Milk You could price an a la carte hamburger at no less than 70¢. In this way your set meal will look economically more attractive and your a la carte sales will cover their own cost. c. Remember, you receive no reimbursement for food sold a la carte so all costs related to them must be recovered by their selling price alone.	Examine the senior high school lunches as listed on HANDOUT #2-2. Circle each one as "R" for Reimbursable, or "N" for Non-Reimbursable. Review answers together and discuss why each meal was classified as it was. Using HANDOUT #2-3 list all the possible choices to make a reimbursable lunch from the menu listed. Correct own paper in class and leave corrected papers with instructor for review.

LESSON 2: INTRODUCTION TO MENU PLANNING II

LESSON CONTENT	CLASS ACTIVITY
B. Why school breakfast is needed 1. Most of us think of the "American breakfast" as a substantial meal with the family all together; a meal that provides a good start for the day. Recent nationwide research found this is not true. a. National research results have indicated: (1) American families do not eat breakfast together. (2) breakfast is a do-it yourself project. (3) not all children arrive at school with a nutritionally adequate breakfast (meeting 1/4 of their RDA). (4) not all students who have inadequate breakfasts make up for the lost nutrients later in the day. (5) generally rural children eat better breakfasts than city children, younger children eat better than older children and boys eat better breakfasts than girls. b. Breakfast studies done in Michigan in 1978-79 indicated that: (1) most children eat something on school days. (2) most children think breakfast is important for them to do well in school. (3) most children eat plenty of protein. (4) most children do not get 25% of their RDA before noon, but do get 100% by the end of the day. (5) some children don't have time to eat breakfast at home. others have no one to prepare it for them. (6) most foodservice workers have positive attitudes about school breakfast programs. (7) milk drunk at breakfast is an important source of the children's daily vitamin D and calcium.	

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LESSON 2: INTRODUCTION TO MENU PLANNING II

LESSON CONTENT	CLASS ACTIVITY
2. Breakfast is important. Research has shown that: a. when breakfast is omitted, students' work efficiency often lessens during the late morning hours. Some children who did not receive breakfast could not do school work as effectively as those who had breakfast. b. some children who did not eat breakfast had a poorer attitude toward school and had lower scholastic achievement than breakfast eaters. c. common breakfast foods need not be eaten as long as the proper nutrients are consumed. For example, protein can be provided by hamburger, cheese, peanut butter as well as by eggs, cereal and pancakes. d. school breakfast is meeting its objective of improving nutrition of American children and hence their zest for life. Results of studies throughout the country indicate less tardiness, less truancy, better attitudes and improved learning of students participating in the School Breakfast Program.	

LESSON CONTENT	CLASS ACTIVITY

3. Minimum breakfast requirements to be a reimbursable breakfast are:

Component	Children 1-3 years	Children 3-6 years	Elementary 6-12 years	Secondary 12-18 years*
Fluid Milk(1)	1/2 c	3/4 c	1 c	1 c
Fruit or Vegetable				
Juice (fruit or vegetable) or Fruit or Vegetable	1/4 c	1/2 c	1/2 c	1/2 c
Bread or Bread Alternate				
Cereal and/or Bread Cereal	1/4 c	1/3 c	3/4 c	3/4 c
Enriched or whole grain bread(2)	1/2 sl	1/2 sl	1 sl	1 sl

Include as often as possible: egg, meat, poultry, fish, cheese, peanut butter or a combination of these.

(1) Two types of milk must be offered, one of which must be unflavored fluid lowfat milk, or skim milk, or buttermilk.

(2) Or an equivalent serving of cornbread, biscuits, rolls, muffins, and similar products of enriched or whole grain meal or flour. Pasta products and rice can be counted in meeting the bread/cereal requirement. (Cookies made of whole grain or enriched flour may be served for supplement only.)

* Portions for high school are indicated as minimums. Larger portions may be served.

Data from: Revised page 59, October, 1980, Menu Planning Guide, PA 1260.

Using HANDOUT #2-5, plan breakfast menus for a high school. Bring the completed menu to the next lesson session for review.

LESSON CONTENT	CLASS ACTIVITY

C. Between Meal Snacks or Supplements

1. Between meal snacks are recommended especially for children in the lower grades, or in pre-school. Small children have small stomachs that empty quickly so a snack between meals helps resolve this situation and makes children more attentive.

   Implementation of between meal snacks is an optional program and is used at the discretion of school administrators, day care and Head Start programs.

   The reimbursable pattern is:

Components	Children 1-3 years	Children 3-6 years	Elementary 6-12 years
Fluid Milk(1) or Full strength juice or	1/2 c	1/2 c	1 c
Fruit or Vegetable	1/2 c	1/2 c	1 c
Bread or Cereal			
Cereal or	1/4 c	1/3 c	3/4 c
Enriched or whole grain bread(2)	1/2 sl	1/2 sl	1 sl

Include as often as possible a serving of protein such as cheese or peanut butter.

(1) Two types of milk must be offered, one of which must be unflavored fluid lowfat milk, or skim milk, or buttermilk.

(2) Or an equivalent serving of cornbread, biscuits, rolls, muffins, and similar products or enriched or whole grain meal or flour. Cookies made of whole grain or enriched flour may be served for supplement only. Pasta products, noodles and rice can be counted in meeting the bread/cereal requirement.

Discuss the between meal snack program in your district. How is it run? How do surrounding schools operate their snack programs? Which of the programs discussed do you think are best for the children?

Using the form on HANDOUT #2-4 plan 2 weeks of mid-morning snacks for a kindergarten class following the guidelines from this lesson.

Data from: USDA 1976. A Planning Guide for Food Service in Child Care Centers, FNS-64, U.S. Govt. Printing Services, Washington, D.C.

HANDOUT #2-1

"OFFER VERSUS SERVE"

1. Question: May a local school district or school, choose not to implement the "offer versus serve" provision, and instead mandate the service of the complete lunch pattern to students of senior high school level in their school?

   Answer: No. P.L. 94-105 mandates this provision nationwide and allows no discretionary powers to states and/or local school officials on this issue.

2. Question: What is the definition of senior high school student?

   Answer: The definition of high school is dependent upon the building arrangement within the district. One school may house 9th-12th grade while another 10th-12th grade.

   If a school houses K-12th grade in one building, a designation must be made by the administrators as to what grade the high school begins. (9-12 or 10-12.) Under no circumstances will students of less than 9th grade be considered as high school.

3. Question: Is the "offer versus serve" provision available to all students in a high school?

   Answer: No. This special option is available only to senior high school students defined above. In schools which serve additional grade levels, the food service must be managed in such a way that students not of senior high school grade level as determined by the Department of Education shall be served the complete lunch pattern.

4. Question: How will the meal pattern be handled in schools with grades other than senior high?

   Answer: Perhaps the simplest way to handle the provision in those schools with grades other than senior high levels is to arrange with the school administration to designate separate serving periods for the students of senior high school levels. In many schools, this practice is currently followed, and in these instances, there should be little disruption to the lunch schedule when implementing the "offer versus serve" provision.

5. Question: Is the "offer versus serve" provision also to be in effect for the School Breakfast Program in senior high schools?

   Answer: No. This applies only to the National School Lunch Program.

6. Question: What is the definition of "offer"?

   Answer: "Offer" means the required complete mealpattern must be made available to students.

7. Question: How are "other" foods (i.e., cakes, cookies, confections, potato chips, corn chips, and ice cream) credited in the reimbursable senior high school lunch?

   Answer: Items not currently credited in the meal pattern will not be credited in the reimbursable senior high school lunch.

8. Question: What are the guidelines on the minimum food items from the meal pattern lunch which are required to be selected to be considered a reimbursable high school lunch?

   Answer: Schools must choose at least three of the five required food items offered. The selection must be comprised of at least three <u>different</u> required food items. No one food item is required to be taken.

9. Question: Can a student select a second serving of any one food item to count towards meeting his obligation to choose three required food items such as a second or a third fruit or vegetable?

   Answer: No. All three required food items selected must be different. If one required food item is refused, the selection of three food items must be made from the remaining offered food items.

10. Question: If a student selects a meat item, a vegetable, a roll and milk from the complete lunch pattern that is offered, may the school claim the milk under the Special Milk Program?

    Answer: No. The milk is offered as a required food item of the required meal pattern lunch and is accepted as part of that lunch. Only the second serving of milk may be claimed under the Special Milk Program.

11. Question: Can a lower price be charged if a student doesn't take a full lunch.

    Answer: No. The lunch must be priced as a unit. If a student chooses less than a complete lunch, he still must pay the price charged for the complete lunch. If a student is eligible for a reduced price lunch, and chooses less than a complete lunch, he still must pay the same reduced price that is charged for a complete lunch.

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HANDOUT #2-2

REIMBURSABLE OR NON-REIMBURSABLE MENUS?

Offer Versus Serve Exercise

Examine the meals below which were selected by high school students. Circle either Reimbursable or Non-reimbursable for each meal.

Meal #1 - 2 oz Oven Fried Chicken
½ c Whipped Potato
½ c Green Beans
1 Roll
½ pint Milk
1 Brownie
REIMBURSABLE NON-REIMBURSABLE

Meal #2 - 3 oz Meat Loaf
½ c Scalloped Potatoes
½ pint Milk
REIMBURSABLE NON-REIMBURSABLE

Meal #3 - 1 c Canned Chicken Noodle Soup
1 Peanut Butter and Jelly Sandwish
with 2 T Peanut Butter + 1 T Jelly
½ c Carrot and Celery Sticks
REIMBURSABLE NON-REIMBURSABLE

Meal #4 - 3 oz Breaded Fish Portion
½ c Green Peas
½ pint Milk
REIMBURSABLE NON-REIMBURSABLE

Meal #5 - 2/2oz servings Fried Chicken
2/ ½ pink Milk
REIMBURSABLE NON-REIMBURSABLE

Meal #6 - 2 oz Hot Turkey plus Gravy on
1 Biscuit
½ c Green Beans
REIMBURSABLE NON-REIMBURSABLE

Meal #7 - 2 oz Sloppy Joe on a Bun
½ c French Fried Potatoes
REIMBURSABLE NON-REIMBURSABLE

Meal #8 - 1 Taco with 2 oz Beef and Cheese
and 1/8 c Lettuce
½ pint Milk
1 Cookie
REIMBURSABLE NON-REIMBURSABLE

Meal #9 - 1 serving pizza with 2 oz beef and
cheese and ½ c tomato sauce
½ c Zucchini & Green Pepper strips
½ c apple
REIMBURSABLE NON-REIMBURSABLE

Meal #10 - ½ c Lettuce and Tomato Salad
1 Roll
½ pint Milk
REIMBURSABLE NON-REIMBURSABLE

HANDOUT #2-2, continued

Meal #11 -	6 oz Tomato Soup 1 Grilled Cheese Sandwich w/ 2 oz cheese ½ c Gelatin Cubes with 2 T Topping	REIMBURSABLE	NON-REIMBURSABLE
Meal #12 -	1 serving Spaghetti with 2 oz of meat and cheese, ½ c spaghetti and ¼ c tomato sauce 1 slice Homemade Garlic Bread	REIMBURSABLE	NON-REIMBURSABLE
Meal #13 -	2 oz Hot Dog on a Bun ½ c Baked Beans ½ c Cabbage Slaw ½ pint Milk	REIMBURSABLE	NON-REIMBURSABLE
Meal #14 -	1 serving Strawberry Shortcake with ½ c strawberries, 1 biscuit and topping ½ pint Milk	REIMBURSABLE	NON-REIMBURSABLE

Answer Key

Meal #1 - Reimbursable
Meal #2 - Reimbursable
Meal #3 - Not Reimbursable
Meal #4 - Not Reimbursable
Meal #5 - Not Reimbursable
Meal #6 - Reimbursable
Meal #7 - Reimbursable
Meal #8 - Not Reimbursable
Meal #9 - Reimbursable
Meal #10 - Reimbursable
Meal #11 - Not Reimbursable
Meal #12 - Not Reimbursable
Meal #13 - Reimbursable
Meal #14 - Reimbursable

HANDOUT #2-3

OFFER vs SERVE MENU

List the following menu on the board. Ask participants to list all possible choices of the foods that would make a reimbursable lunch.

Cheeseburger on Bun
Lettuce, Tomato, Pickle, Chips
Cole Slaw
Cherry Pie
Milk

Answer Key

Any combination of 3 foods from 3 different groups would be an acceptable and reimbursable combination.

HANDOUT #2 -4

BETWEEN MEAL SUPPLEMENTS

(Can Be An At Home Assignment)

Using the form below, plan 2 weeks of mid-morning snacks for a group of kindergarten children. Bring the completed menu to the next lesson session. Specify portions for all foods planned.

	Week 1	Week 2
MONDAY Milk, Juice, Fruit, Vegetable: Bread/Cereal:		
TUESDAY Milk, Juice, Fruit, Vegetable: Bread/Cereal:		
WEDNESDAY Milk, Juice, Fruit, Vegetable: Bread/Cereal:		
THURSDAY Milk, Juice, Fruit, Vegetable: Bread/Cereal:		
FRIDAY Milk, Juice, Fruit, Vegetable: Bread/Cereal:		

HANDOUT #2-5

BREAKFAST MENU ASSIGNMENT

(Can Be An At Home Assignment)

Plan breakfast menus for 2 weeks for a high school. Bring this completed menu to the next lesson session. Specify portions for all foods planned.

	Week 1	Week 2
MONDAY Juice, Fruit, Vegetable: Cereal/Bread: Milk: Protein:		
TUESDAY Juice, Fruit, Vegetable: Cereal/Bread: Milk: Protein:		
WEDNESDAY Juice, Fruit, Vegetable: Cereal/Bread: Milk: Protein:		
THURSDAY Juice, Fruit, Vegetable: Cereal/Bread: Milk: Protein:		
FRIDAY Juice, Fruit, Vegetable: Cereal/Bread: Milk: Protein:		

Lesson 3

A MENU PLANNING SYSTEM

A. Goal of this lesson

The goal of this lesson is to help school foodservice personnel understand the importance of, and develop skill in using a menu planning system.

B. Purpose of this lesson

After completing this lesson the participants should be able to:

1. Use the guidelines provided in the lesson and evaluate a given foodservice operation in regards to providing an adequate environment (equipment, area, resources) for properly planning menus.
2. Review resources and materials on hand to plan menus in a given foodservice. Identify other resources that should be available and locate a source for obtaining them.
3. Apply the proper steps in planning a week's menu as described in the lesson.
4. Evaluate a menu using a given evaluation form.

C. Instructor preparation for class activities

1. Duplicate sufficient copies of handouts.
2. Obtain blackboard, chalk, eraser.
3. Collect reference materials to share, p. 59 - 63.
4. Obtain USDA fact sheets listed in reference list.

D. Key words used in this lesson

Cycle Menu: A set of menus carefully planned to be rotated over a specified period of time.

Textured Vegetable Protein: A processed food product usually made from defatted soy beans. It can be added to, or can replace meat, fish or poultry in some combination dishes.

E. REFERENCES FOR FURTHER INFORMATION

1. A Menu Planning Guide For School Food Service, See Reference List, Lesson 1.

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LESSON 3: A MENU PLANNING SYSTEM

LESSON CONTENT	CLASS ACTIVITY
Much of the information in this lesson was taken from the following publication, A Menu Planning Guide for School Food Service, Program Aid #1260 and Revised Pages, October, 1980. From the management standpoint, menu planning is probably the most important phase of school foodservice operation. Menus must reflect the operational realities of the foodservice system. Menus can be planned more easily and efficiently when a systematic method is followed. A. Organize the place 1. Have a special place where menus are planned. 2. A well-arranged office, if one is available, or a quiet corner in the kitchen or dining area is a good place to plan menus. 3. Equip the space to be used with a desk or table, a chair, a bulletin board, a file cabinet or bookcase for reference materials and recipes. B. Arrange the reference materials and special aids in an orderly fashion 1. Label all reference materials: previous menus, inventories of USDA-donated foods and purchase foods, USDA-fact sheets on donated foods, market reports, price lists, menu suggestions (popular items), newsletters. Keep all files at the menu planning center. 2. Have Menu Planning Guides (see reference list), Food Buying Guide, USDA recipe card file, menu forms or record books readily available. 3. Refer to school calendar, school and local papers for current activities that may affect the school menus such as days off, special assemblies or holidays.	List on the blackboard the items noted at the left as necessary for proper menu planning, such as office area, desk, chair, file cabinet, book shelves, bulletin board. Also make a list of the reference materials mentioned and any other references that participants have found helpful in planning menus. Ask each participant to evaluate his/her own foodservice operation against this list. What things are missing? Can the missing items be provided and located? When possible bring samples of various reference materials to class so everyone can become familiar with them.

LESSON CONTENT	CLASS ACTIVITY
C. Determine the period of time for which menus will be planned 1. Plan menus for at least a month at one time (cycle menus are discussed in a later lesson). 2. Consider purchasing practices and delivery schedules for USDA donated foods and locally purchased foods. D. Schedule a time to plan 1. Plan menus from two weeks to a month ahead of the time they are to be served. 2. Decide on the day(s) of the week or month when you will plan menus. Set aside a special time when you will be free from interruption. Select a time when you are relaxed and your appetite is good. Meet your schedule. 3. Allow enough time to study food inventories, current market and price reports, and previous menus used. Also review menu suggestions and select receipes to be used. 4. Allow time to determine quantities of foods needed and prepare market orders. 5. Allow time to involve interested individuals and student groups. Remember, student involvement helps sell school lunches. E. Plan for the total job 1. Good menu planning goes beyond the listing of specific foods to be included in daily lunches. A menu planning worksheet can help systemize the total job. (See HANDOUT #3-1.) 2. Record the menus planned on a worksheet designed for that purpose and suited to individual needs.	

LESSON CONTENT	CLASS ACTIVITY
3. Select the specific recipes to be used in preparing the different menu items. Refer to PA-631, Quantity Recipes for Type A School Lunches. Although the Type A pattern no longer exists, these recipes are still good for school lunch..	
4. Determine the size serving desired.	
5. Evaluate the menus from the standpoints of meeting school menu requirements as well as quality and quantity.	
6. Estimate the number of lunches to be prepared.	
7. Adjust the recipes selected to provide the necessary number of servings. (Explained in lesson on Standardized Recipes, Food Preparation Manual.)	
8. Calculate the amounts of food required for the total number of lunches to be served to boys, girls and adults. Use A Menu Planning Guide for School Food Service, PA 1260 and Food Buying Guide for School Food Service, PA 1257 (discussed in detail in School Food Service Training Manual on Food Preparation).	
9. Calculate the cost of the lunches. Discussed in detail in lesson 6*, on Food Cost Controls; and Prepare purchase orders relative to food inventories. Discussed in lesson 5*, on Food Cost Controls. *Both lessons in Cost Control School Food Service Training Manual.	
10. Develop production time and work schedules. Discussed in detail in School Food Service Training Manual on Food Preparation.	
CAREFUL SYSTEMATIC PLANNING OF MENUS--WELL IN ADVANCE--IS A KEY TO GOOD MANAGEMENT!	
F. Plan for variety	
1. Plan to include a wide variety of foods from day to day.	
a. Do not use the same food on consecutive days--meat balls with spaghetti on Monday and beef patties on Tuesday.	

LESSON CONTENT	CLASS ACTIVITY
b. Do not use the same food on the same day each week. Each Monday should not be "hot dog" day nor Tuesday "chicken and mashed potato" day.	
2. Plan for a variety of types of lunches. Plan lunches around a casserole, a soup and sandwich, or main dish salad.	
3. Plan to include different forms of foods prepared in different ways. Lists of various main dishes, ways to prepare vegetables and suggestions for variety in breads will be helpful.	
a. Do not use two foods prepared in the same way in the same lunch--two creamed dishes or two casserole-type dishes.	
b. Do not use foods prepared in the same way each time they are served--vegetables can be served raw or cooked, peeled or unpeeled, butter or creamed, scalloped with different sauces or seasonings--but be sure the "different way" of serving is as good or better than the "usual way".	
4. Plan to include the food combinations most acceptable to children. Include a surprise item or a small amount of a new or unfamiliar food. For example, serve roast beef and mashed potatoes occasionally--but add cheese balls rolled in nuts as a garnish on the salad or add a small serving of an unfamiliar or less popular food such as a salad with fresh spinach or raw cauliflower.	
G. Plan for contrast	
1. Plan to use some crisp, firm foods with soft, creamy ones.	
a. Use something crisp or firm in each lunch--a green salad, raw vegetable sticks or hard rolls.	
b. Do not use too many starch foods in the same menu--macaroni and potatoes, noodles and corn, sweet potatoes and rice.	

LESSON CONTENT	CLASS ACTIVITY
2. Plan to use a combination of mild and strong flavored foods. a. Do not use too many foods with pronounced flavors in the same lunch--broccoli, onions and turnips, cabbage and cauliflower. b. Do not use two foods of the same flavor together--tomato juice and stewed tomatoes, macaroni and cheese and a pineapple-cheese salad, or corn and cornbread. 3. Plan to use a pleasing combination of different sizes and shapes of foods. a. Do not use too many chopped or mixed items in the same lunch--potato-ham-cheese casserole, tossed salad and fruit cup. b. Do not use too many foods of the same shape together--round meat balls, steamed potatoes, whole beets and muffins; or cubed meet, diced potatoes, mixed vegetables and fruit cocktail. H. Plan for eye appeal 1. Plan to use combinations of colors that blend well. Consider the color of the dishes to be used as well as the colors of the foods. a. Use at least one or two colorful foods in each menu. The natural red, green, and orange colors of fruits and vegetables add eye appeal. b. Use colorful foods in combination with those of little or no color--broccoli spears with creamed potatoes; pimento or green pepper in corn pudding. c. Use garnishes to brighten food naturally lacking in color--a slice of radish or cucumber, stuffed olives, a tomato wedge, sieved egg, a bit of brightly colored fruit, a sprig of parsley or watercress, a dash of paprika. 2. Plan the way the menu items will be placed on the tray or plate. Visualize how the foods will look when served and decide on the most attractive arrangement.	

LESSON 3: A MENU PLANNING SYSTEM

LESSON CONTENT	CLASS ACTIVITY
I. When writing menus consider 1. Food Habits of the children--Plan lunches that cater to the regional, cultural and personal food preferences of children--however, include "new" or less popular foods with well-liked or familiar ones. a. Introduce as "new foods" those which supply the nutrients most often lacking in home diets. b. Be sure menus do not reflect just your personal food preferences. 2. Special Occasions. Plan lunches which have a festive air for school and national holidays, childrens' birthdays, parents' visiting days, Universal Menu for National School Lunch Week. Dress up the foods in these lunches. Use imagination in planning the kinds of food to serve--the garnishes to use--the shapes of cookies--cake decorations. 3. Climate or Seasons. Plan lunches that include more hot foods in cold weather, more cold foods and salads in warm weather. 4. Availability of Foods. Plan lunches that include foods "in season". Serve fresh foods when they are plentiful and at the peak of quality.	Review HANDOUT #3-2, Sources of Vitamin A, Vitamin C and Iron. Use it as a reference to give the menu writer ideas when planning menus. Read through each group of foods on this list so as to become familiar with it.
J. Steps in planning school lunch menus The thoughtful planning of menus for a given period of time (usually a month or more) helps ensure a good variety of foods, increased use of USDA-donated foods, economy in buying, and effective use of facilities and employee's time and skills. To plan menus, select the school lunch patterns appropriate for the age groups to be served and follow the steps below: 1. Step 1 - select a meat or meat alternate Plan the meat or meat alternate for the entire length of the menu cycle or menu period at one time. Use a variety of meat	

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LESSON CONTENT	CLASS ACTIVITY
or meat alternates alone or in casseroles, stews, as loaves or use as the main dish with one other menu item such as soups, salads or sandwiches. a. Include meat or meat alternates that are good sources of iron as frequently as possible. b. If the same main dish is repeated during the menu period, vary the vegetables and fruits used that day. Remember: (1) eggs, cooked dry beans or peas, and peanut butter may be combined with meat, poultry, fish or cheese to meet the total meat/meat alternate requirement. Eggs, cooked dry beans and peas, and peanut butter may be used alone or in combination with one another to meet the total meat/meat alternate requirement. (2) textured vegetable protein products are allowed as a meat alternate when no more than 30% of the hydrated products are mixed with 70% uncooked meat, poultry or fish (see USDA Fact Sheet: Textured Vegetable Protein Products). (3) enriched macaroni products with fortified protein--one ounce of this dry macaroni or spaghetti (1/2 to 3/4 cup cooked) may be used as one ounce of meat alternate when mixed with one ounce of cooked meat, poultry, fish or cheese in a main dish. (See USDA Fact Sheet: Enriched Macaroni Products with Fortified Protein.) (4) cheese alternate products may be combined with natural or processed cheese and used in the cooking or heating process in menu items such as macaroni and cheese, cheeseburger, pizza, etc. Cheese alternate products shall not exceed the quantity by weight of natural or processed cheese. (See USDA Fact Sheet: Cheese Alternate Products.)	

LESSON CONTENT	CLASS ACTIVITY
2. Step 2 - choose the vegetables and fruits a. Include 2 or more servings of vegetables and/or fruits. (1) Plan to use vegetables raw or cooked...alone or combined in salads, casseroles, stews. (2) Plan to use fruits raw or cooked...along or combined in salads, fruit cups, desserts. (3) Plan vegetables and fruits that "go well" with each main dish and each other. Use a different combination of two or more servings of vegetables and fruits each day. Include all forms of vegetables and fruits: fresh, canned, frozen and dried. (4) Include vegetables and fruits that are sources of: Vitamin A - - - - - - - - at least twice a week Vitamin C - - - - - - - - 2 or 3 times a week Iron - - - - - - - - - - as frequently as possible (See HANDOUT #3-2 for sources of these nutrients) (5) Include fresh vegetables and fruits frequently. b. Remember: (1) full-strength vegetable or fruit juice may be counted to meet no more than 1/2 of the vegetable-fruit requirement. (2) cereal foods such as enriched macaroni, spaghetti, noodles and rice are considered bread or bread alternates and do not meet the vegetable-fruit requirement. (3) menu items such as fruit cocktail, peas and carrots, and combination salads are considered as only one serving of a vegetable or fruit. 3. Step 3 - select a variety of breads a. Use one or more portions of whole-grain or enriched bread or bread alternates which will "go well" with the main dish and other items in each lunch. b. Plan to use a different kind of bread or bread alternate each day.	

LESSON CONTENT	CLASS ACTIVITY
c. Include school-made loaf breads or hot breads such as rolls, sandwich buns, muffins, biscuits, or cornbread as often as possible. Also include a variety of enriched rice, macaroni, noodles and pasta products. d. Refer to Handout #1-11, page 24, on Bread and Bread Alternates for guidance on determining the kinds and amounts of bread-type items that may be used to meet the bread requirement. e. Remember: you must include a serving of bread or an equivalent quantity of a bread alternate each day. 4. Step 4 - include milk a. Plan to use a lowfat, unflavored fluid milk as a beverage. Offering a choice of milks, such as whole, skim, lowfat, flavored or buttermilk is optional. b. Remember: nonfat dry milk and fluid milk used in food preparation may not be counted toward meeting the milk requirement, but use nonfat dry milk in cooking to keep costs down and nutritive value up. 5. Step 5 - include a dessert or other foods as needed a. Include desserts and other foods in the lunches to help meet the students' needs for calories and other nutrients, especially iron. b. Plan to serve more satisfying foods with the lighter lunches. Serve lighter desserts with more hearty lunches.	Using either HANDOUT #3-3 or #3-4, ask each participant to complete a menu for 1 week and bring it to the next class session. Menus should be developedin a step by step process as described in this lesson. Menus will be evaluated by fellow participants during the next lesson using HANDOUT #3-5. As a group, review the various sections of the Menu Planning Worksheet, HANDOUT #3-1. Then review HANDOUT #3-1 to see how this form can be used as a tool in menu planning and purchasing. After the above menu written by each participant, has been evaluated, have each person enter their corrected menu on this worksheet. Check once again on this worksheet for foods providing sources of Vitamin A and C, and iron. The rest of this worksheet will be completed during the lessons on Food Cost Controls, Purchasing/Menu and Production, in the Cost Control School Food Service Training Manual, so make sure each participant keeps his/her copy.

LESSON CONTENT	CLASS ACTIVITY
c. Remember: desserts containing such foods as fruits, eggs, peanut butter, milk and enriched or whole-grain cereals, flour, or meal are desirable. d. Note: General dietary guidelines for Americans should include: (1) eat a variety of foods (2) maintain ideal weight and avoid too much sugar (3) avoid too much fat, saturated fat and cholesterol (4) eat foods with adequate starch and fiber (5) avoid too much sodium	

HANDOUT #3-1

MENU PLANNING WORKSHEET

Day of Week and Number of Lunches	MENU	Size of Serving	PLAN THE KIND AND AMOUNTS OF FOODS NEEDED FOR THE NUMBER TO BE SERVED								
			Meat and Meat Alternate	Vegetables and Fruits	Check Vitamin A	Check Vitamin C	Check Iron	Bread	Milk	Other foods
MONDAY Planned: _____ Served: Children____ Adults_____ Total_____	Cost/Lunch_____									
TUESDAY Planned: _____ Served: Children____ Adults_____ Total_____	Cost/Lunch_____									
WEDNESDAY Planned: _____ Served: Children____ Adults_____ Total_____	Cost/Lunch_____									
THURSDAY Planned: _____ Served: Children____ Adults_____ Total_____	Cost/Lunch_____									
FRIDAY Planned: _____ Served: Children____ Adults_____ Total_____	Cost/Lunch_____									

MSU-NET
FSHN/80

HANDOUT #3-1

MENU PLANNING WORKSHEET

Day of Week and Number of Lunches	MENU	Size of Serving	PLAN THE KIND AND AMOUNTS OF FOODS NEEDED FOR THE NUMBER TO BE SERVED							
			Meat and Meat Alternate	Vegetables and Fruits	Check Vitamin A	Check Vitamin C	Check Iron	Bread	Milk	Other foods
MONDAY Planned: 300 Served: Children____ Adults____ Total____	Country Fried Steak D-26 / Brown Gravy Oven French Fried Potatoes Buttered Broccoli Sliced Peaches Buttered Cornmeal Yeast Roll B-8 Milk Cost/Lunch____	2 oz ¼ c ½ c ¼ c ½ c 1 roll ½ pt	Ground Beef 17.5 lb x 3 = 52-½ lb. D-26 (3 x RECIPE)	Potatoes, French Fries, Regular Crinkle cut 13.6 lb x 3 = 41 lb Broccoli, Frozen Chopped 11.6 lb x 3 = 35 lb. Peaches, Canned Sliced 2.1/10 x 3 = 6-1/2/10		x	x x x	B-8 Commercial Yeast Roll (3 x RECIPE)	300 ½ pt.	
TUESDAY Planned: ____ Served: Children____ Adults____ Total____	Oven Fried Chicken D-39 Parsley Rice B-2 Savory Peas J-18 Chilled Fruit Cup (¼ c Pineapple ⅛ c Banana ⅛ c Grapefruit) Roll Butter (on peas & roll) Milk Chocolate Chip Cookies G-25a Cost/Lunch____	2 oz ½ c ¼ c 1 roll 1 tsp ½ pt 1	Chicken, Frying 41.75 lb x 3 = 125-¼ lb. D-39 (3 x RECIPE)	J-18 (1.5 x RECIPE) Canned Green Peas 4.63/10 x 1.5 = 2/10 Onions 1.12 lb x 1.5 = 1-¾ lb Fruit Cup (½ c) Canned Pineapple Chunks 2/12/10 x 3 = 6-½/10 Grapefruit Sections 2.2/3 c x 1 x 3 = 7/3 cyl Bananas 6.2 x 3 = 18-¾ lb		x	x x x	B-12 Rolls (3 x RECIPE)	300 ½ pt	B-2 Rice 12-½ lb (12-1/3 c @ 12 scoop) or 1-½ gal cooked rice 3 lb) C-25a (3 x RECIPE)
WEDNESDAY Planned: ____ Served: Children____ Adults____ Total____	Fish Sticks/Catsup Confetti Corn Glazed Carrots J-13a Tossed Salad/Tomatoes E-10, & French Dressing French Bread B-9 Butter (on corn & carrots) Milk Gingerbread C-14 Cost/Lunch____	2.3 oz ¼ c. ½ c. ¼ c 1 serv 1 tsp. ½ pt. 1 serv.	4 oz Breaded Fish Portions 25 lb x 3 = 75 lb.	Corn, Whole Kernel Wet Pack 2.25/10 x 3 = 7/10 Pimento, Green Pepper (Canned J-13a (1.5 x RECIPE) Lettuce 5.5 lb x 1.5 = 8-¼ lb Spinach 1.4 lb x 1.5 = 1-¼ lb Onions 84 lb x 1.5 = 1-¼ lb Tomatoes 6.4lb x 1.5 = 9-¾ lb Radishes 2.2 lb x 1.5 = 3-½ lb		x	x	B-9 French Bread (1.5 x RECIPE) 15 loaves 20 slices each	300 ½ pt	Catsup C-14 Gingerbread (3 x RECIPE)
THURSDAY Planned: ____ Served: Children____ Adults____ Total____	Lasagna D-31 Seasoned Green Beans Cabbage Green Pepper Slaw E-7a Apricot Crisp C-3a Wheat Bread B-13c Butter (on beans & bread) Milk Cost/Lunch____	2 oz ¼ c. ½ c ¼ c (Fork) 1 slice 1 tsp ½ pt.	D-31 (3 x RECIPE) Ground Beef 8 lb x 3 = 24 lb Cheese 7.5 lb x 3 = 22-½ lb.	Green Beans 2/10 x 3 = 6/10 E-7a (1.5 x RECIPE) Cabbage 15.25 lb x 1.5 = 22-½ lb Green Peppers 1.62 lb x 1.5 = 2-½ lb C-3a (3 x RECIPE) Canned Apricot Halves 3.12/10 x 3 = 9-½/10 Lemon Juice 3 oz x 3 = 9 oz	x	x	x x	B-13a Wheat Bread (1 RECIPE 10 loaves 20 slices each	300 ½ pt	100
FRIDAY Planned: ____ Served: Children____ Adults____ Total____	Toasted Cheese Sandwich B-8 Potato Salad on Lettuce E-14 Tropical Apples C-24 Butter (on Sandwich, on Apples) Milk Cinnamon Crispies C-11 Cost/Lunch	2 oz (Cheese) ½ c ⅛ c ¼ c 1 tsp ½ pt. 1	Cheese 12.5 lb x 3 = 37-½ lb. G-8 (3 x RECIPE)	E-14 (3 x RECIPE) Potatoes 18.25 lb x 3 = 54-¾ lb Celery 4 lb x 3 = 12 lb Onions 1.12 lb x 3 = 3-½ lb Lettuce 2.05 lb x 3 = 6-¼ lb C-24 (1.5 x RECIPE) Apples, Canned 4/10 x 1.5 = 6/10 Oranges 3 lb x 1.5 = 4-½ lb Lemons 1.½ lb x 1.5 = 2 lb		x	x X	G-8 Bread 17.2 lb Loaves 600 Slices	300 ½ pt	C-11 Cinnamon Crispies (3 x RECIPE)

HANDOUT #3-2

FOODS FOR SCHOOL LUNCHES AND BREAKFASTS

Meat and Meat Alternate	Vegetables and Fruits		
	Include a VITAMIN A vegetable or fruit at least twice a week[1]	Include a VITAMIN C vegetable or fruit at least two or three times a week[2]	Include these vegetables and fruits as needed
Cheese Cheddar Cottage Swiss	½-cup serving (about 1500 or more international units of Vit. A)	½-cup serving (about 25 milligrams or more of Vit. C)	Apples Applesauce Avocados
Dry beans	Beet greens	Acerola	Bananas
Dry peas	Carrots	Broccoli[4]	Beans, green or wax
Eggs dried whole, frozen, whole shell	Chard, swiss	Brussels sprouts	Bean, lima, green
Fish and shellfish	Chili peppers, red[3]	Chili peppers, red[4] and green	Bean sprouts
Meat - canned dried, fresh and frozen Beef Lamb Pork Veal Variety meats Bologna Frankfurters Liver[5] and other organ meats Knockwurst	Collards[3]	Guavas	Beets
	Cress, garden[3]	Orange juice	Berries (black, blue, etc.)
	Dandelion greens[3]	Oranges	Celery
	Kale[3]	Papayas[4]	Chinese cabbage
	Mangoes[3]	Peppers, sweet red[4] and green	Corn
	Mixed Vegetables (frozen)		Cranberries
	Mustard greens[3]	½-cup serving (about 15-25 milligrams of Vit. C)	Cranberry sauce
	Peas and carrots (canned or frozen)		Cucumbers
	Peppers, sweet red[3]	Cauliflower	Dates
	Pumpkin	Collards[4]	Eggplant
	Spinach[3]	Cress, garden[4]	Figs
	Squash, winter, (acorn, butternut, Hubbard)	Grapefruit	Fruit Cocktail
		Grapefruit juice	Fruits for salads
		Grapefruit-orange juice	Grapes
	Sweet potatoes[3]	Kale[4]	Lettuce
	Turnip greens[3]	Kohlrabi	Mixed vegetables (canned)
Peanut butter	½-cup serving (about 750-1500 international units of Vit. A)	Kumquats	Mushrooms
Poultry - canned fresh and frozen Chicken Turkey		Mangoes[4]	Olives
		Mustard greens[4]	Onions
Cheese alternate (when mixed in a cooked product with natural or processed cheese)	Apricots	Pineapple juice (canned - Vit. C restored)	Parsley
	Broccoli[3]	Strawberries	Parsnips
	Cantaloupe[3]	Tangerine juice	Peaches (canned)
	Chicory greens	Tangerines	Pears
Protein-fortified enriched macaroni (when mixed with meat, poultry, fish or cheese)	Papayas[3]	½-cup serving (about 8-15 milligrams of Vit. C)	Peas and carrots (canned)
	Purple plums (canned)		Cowpeas
Textured vegetable protein (when mixed with meat, poultry, or fish)	½-cup serving (about 750-1500 International units of Vit. A)	Asparagus	Pimientos
		Cabbage	Pineapple
	Asparagus, green[3]	Cantaloupe[4]	Plums
	Cherries, red sour	Dandelion greens[4]	Potatoes (mashed, etc.)
			Radishes
			Raisins
			Rhubarb
			Squash, summer
			Watercress

Meat and Meat Alternate	Vegetables and Fruits		
	Include a VITAMIN A vegetable or fruit at least twice a week[1]	Include a VITAMIN C vegetable or fruit at least two or three times a week[2]	Include these vegetables and fruits as needed
	Chili peppers, green (fresh)[3] Endive, curly Escarole Nectarines Peaches (except canned) Prunes Tomatoes[3] Tomato juice or reconstituted paste or puree[3]	Honeydew melon Okra Potatoes (baked boiled, or steamed) Potatoes (reconstituted instant mashed - Vit. C restored) Raspberries, red Rutabagas Sauerkraut Spinach[4] Sweet potatoes[4] (except those canned in syrup) Tangelos Tomatoes Tomato juice or reconstituted paste or puree Turnip greens Turnips	Watermelon Fruit juices (apple, grape, pineapple, etc.)

[1]Vitamin A Vegetables and Fruits. The vegetables and fruits listed will supply at least 750 International Units of Vitamin A per ½- or ½-cup serving. When these vegetables and fruits are served at least twice a week in recommended amounts along with a variety of additional vegetables and fruits used to meet the vegetable and fruit requirement, the Vitamin A content of the lunch will generally meet one-third of the Recommended Dietary Allowance for each age/grade group.

[2]Vitamin C Vegetables and Fruits. The vegetables and fruits listed will supply about 8 milligrams or more Vitamin C (ascorbic acid) per ½-cup serving. When these vegetables and fruits are served at least two or three times a week in recommended amounts along with a variety of additional vegetables and fruits to meet the vegetable and fruit requirement, the Vitamin C content of the lunch will generally meet one-third of the Recommended Dietary Allowance for each age/grade group.

Data from: Menu Planning Guide, May, 1980, page 12.

Bread and Bread Alternate (enriched or whole-grain)	Milk	Foods for Iron[6]
Group 1(0.9 oz or 25 gm)	Milk, fluid	Meat and Meat Alternate
Bagels	Cultured buttermilk	Dry beans and peas
Biscuits	Flavored milk	Eggs
Boston brown bread	Lowfat	Meats in general especially liver and other organ meats
Buns (all types)	Skim	Peanut Butter
Coffee cake (breakfast only)	Whole	Poultry
Cornbread		Shellfish, tuna
Doughnuts (breakfast only)		Turkey
English muffins		Vegetables and Fruits
French or Vienna		Apricots (canned)
"Fry" bread		Asparagus
Italian bread		Beans - green, wax, lima (canned)
Muffins		Bean sprouts
Pretzels (soft)		Beets (canned)
Pumpernickel		Broccoli
Raisin bread		Brussels sprouts
Rolls		Cherries (canned)
Rye bread		Dried fruits - apricots dates, figs, peaches, prunes, raisins
Stuffing (bread)		Grapes (canned)
Sweet rolls (breakfast only)		Parsnips
Syrian bread (flat)		Peas, green
White bread		Potatoes (canned)
Whole wheat bread		Sauerkraut (canned)
Group 2(0.7 oz or 20 gm)		Squash (winter)
Bread sticks (dry)		Sweet potatoes
Melba toast		Tomatoes (canned)
"Pilot" bread		Tomato juice, paste, puree, sauce
Rye wafers		Vegetables
Saltine crackers		Dark green leafy - beet greens, chard, collards, kale, mustard greens, spinach, turnip greens
Soda crackers		Vegetable juice (canned)
Taco shells		Bread and Bread Alternates
Zwieback		All enriched or whole-grain bread and bread alternates
Group 3(1.1 oz or 30 gm)		
Dumplings		
Hush puppies		
Meat pie crust		
Meat turnover crust		
Pancakes		
Pizza crust		
Popovers		
Sopapillas		
Spoonbread		
Tortillas		
Waffles		

Bread and Bread Alternate (enriched or whole-grain)	Milk	Foods for Iron[6]	
Group 4 (½-cup cooked) Bulgur Corn grits Dry cereals (breakfast only- 3/4 cup or 1 oz) Lasagna noodles Macaroni Noodles (egg) Rice Spaghetti Farina			

[3] See listing of Vitamin C foods.

[4] See listing of Vitamin A foods.

[5] One ounce provides more than 1500 International Units of Vitamin A.

[6] Foods for Iron. Because of the way iron is distributed among many foods (meats, vegetables and fruits, and breads), it is recommended that each lunch include several foods that are worthwhile sources of iron in sufficient quantities for the age/grade group served. The list of foods for iron includes meat and meat alternate foods that supply at least 1.0 milligram of iron per 2-ounce serving of meat or alternate, breads and other foods that supply 0.6 milligram of iron per serving, and fruit and vegetables that provide at least 0.3 milligram of iron per 1/4-cup serving.

The extent the body can make use of the iron in foods depends not only on the amount of iron in foods but on the source of iron and on other foods that are eaten in the meal. The body can make better use of the iron in these foods if they are eaten in the same meal as a good source of Vitamin C or along with meat.

From: Revised Pages, Menu Planning Guide, October, 1980, page 13.

NOTE: The Revised Menu Planning Guide does not provide information about food ingredients that should be used sparingly in school meals. The following ingredients should be used in moderation.

Food Ingredients That Should be Used in Moderation

Fat
Butter
Margarine
Lard
Beef fat or tallow
Pork fat
Vegetable oils:
  Corn oil
  Safflower oil
  Peanut oil
  Soybean oil
  Coconut oil
Shortening

Salt (Sodium compound)
Table salt
Seasoning salts:
  Onion
  Garlic
Meat tenderizers
Seasoning mixes:
  Salad seasoning
  Taco seasoning
Baking powder
Baking soda

Sugar (Sweeteners)
Granulated sugar
Powdered sugar
Light brown sugar
Dark brown sugar
Liquid brown sugar
Molasses
Maple sugar and syrup
Corn syrup
Honey

HANDOUT #3-3

PLAN A MENU FOR ONE WEEK--ELEMENTARY

Using HANDOUT #3-2 for ideas, create a weeks menu for an elementary school (ages 5 to 8 years). Bring completed menu to the next lesson for evaluation

	PROTEIN	FRUIT	VEGETABLE	BREAD
*Monday				
*Tuesday				
*Wednesday				
*Thursday				
*Friday				

*All menus include 1/2 pt milk, lowfat

HANDOUT #3-4

PLAN A MENU FOR ONE WEEK--HIGH SCHOOL

Using HANDOUT #3-2 for ideas, create a weeks menu for a high school. Bring the completed menu to the next lesson for evaluation.

	PROTEIN	FRUIT	VEGETABLE	BREAD
*Monday				
*Tuesday				
*Wednesday				
*Thursday				
*Friday				

*All menus include 1/2 pt milk, lowfat

HANDOUT #3-5

HOW TO EVALUATE MENUS

When participants return with a completed weeks menu for a high school or an elementary school (Handout #3-3 and #3-4), use the questions below to evaluate the menu. Swap menus among participants to that each person does the evaluation of a menu that is not their own. After being evaluated, ask each participant to make any corrections or changes that were noted on the evaluation check list.

	YES	NO	COMMENTS/SUGGESTIONS
1. Are all components of the lunch included each day?			
2. Are serving sizes sufficient to provide:			
A. meat or meat alternate as specified in the appropriate meal pattern?			
B. two or more vegetables or fruits or both?			
C. appropriate servings of enriched or whole-grain bread per week?			
D. fluid lowfat milk as a beverage?			
3. Is a VITAMIN A vegetable or fruit included at least twice a week?			
4. Is a VITAMIN C vegetable or fruit included 2 or 3 times a week?			
5. Are foods rich in IRON included?			
6. Are foods planned and included to satisfy the appetites of this age group?			
7. Are the combinations of foods pleasing and acceptable to this age group?			
8. Do lunches have a good balance of:			
A. Color - in the foods themselves or as a garnish?			
B. Texture - soft, crisp, firm?			
C. Shape - different size and shapes?			
D. Flavor - bland and tart, or mild and strong?			

	YES	NO	COMMENTS/SUGGESTIONS
9. Are most of the foods and food combinations ones this age of children have learned to eat?			
10. Have children's cultural, ethnic, and religious food practices been considered?			
11. Is a popular food or dish planned for lunch which includes a "new" or less popular food?			
12. Are foods varied from day to day?			
13. Are different kinds or forms of foods (fresh, canned, frozen, dried) included?			
14. Are seasonal foods included?			
15. Have "new" foods or new methods of preparation been included occasionally?			
16. Can lunches be prepared and served successfully by employees in the time available?			
17. Are lunches planned so that some preparation can be done ahead?			
18. Is work load balanced among employees from day to day?			
19. Can lunches be prepared and served with facilities and equipment available?			
20. Is oven, surface-cooking or steam-cooking space adequate for items planned for each lunch?			
21. Can foods planned for each lunch be easily served?			
22. Will foods "fit" on dishes or compartment trays?			
23. Have USDA-donated foods been used to best advantage?			
24. Do high- and low-cost foods and lunches balance?			

Lesson 4 PROGRESS TEST FOR LESSONS 1, 2 and 3 ON MENU PLANNING

A. Goal of this lesson

The goal of this lesson is to review the most important aspects of the past 3 lessons, by administering the following Progress Test.

B. Purpose of this lesson

After completing this lesson, the participants should be able to:

1. summarize and review the important information presented in Lessons 1, 2 and 3,
2. emphasize the most important points presented in Lessons 1, 2 and 3, and
3. identify subject areas in which participants desire or need further study and practice.

C. Instructor preparation for class Progress Test

1. The time allowed for this lesson is approximately 25 minutes.
2. Duplicate sufficient copies of Progress Test.
3. How the Progress Test should be given:
   a. Pass out copies of the Progress Test to each participant.
   b. Provide pens and pencils for those who may not have brought their own.
   c. Explain that the reason for this Progress Test is to review the important information presented in the past three lessons.
   d. Briefly go through the test together to explain the different kinds of questions to be sure that all participants know what they need to do for each question.

NOTE: The Progress Test should NOT scare or humiliate participants or be used as a device to keep them from continuing on with further lessons. There is no minimum score of success. This is an exercise or learning activity just as the other lessons have been.

e. Allow approximately 25 minutes for participants to complete the test.

f. Allow participants to keep their own test while answers are discussed.

g. State aloud which answer(s) are correct for each question.

h. Discuss how to change false statements so they read "true".

i. Lead a class discussion relating to reasons why other choices, if given, are incorrect. Ask participants to give examples of the application of each question to their school foodservice situation.

j. Allow any participants who desire to do so to retake the test on their own time.

k. Provide additional references on any topic to participants who desire further information.

Lesson 4

PROGRESS TEST I - MENU PLANNING

True and False: Circle (T) if the statement is true, (F) if it is false.

T F 1. Serving chicken a la king and beef stew on the same day is acceptable since they are made from different meats.

T F 2. Menus should be written 1 to 2 weeks in advance of their serving date.

T F 3. The Recommended Dietary Allowance (RDA) is a list of food expected to be plentiful and thus reasonable in cost.

T F 4. Hot dog on a bun, french fries and raw carrot sticks would make a good looking menu combination.

T F 5. The School Lunch Pattern is designed so that 1/3 the Recommended Dietary Allowance (RDA) is usually obtained.

T F 6. The School Breakfast Pattern is designed so that 1/3 of the RDA is always obtained.

T F 7. This is an acceptable school breakfast: milk, boiled egg and orange juice.

T F 8. This is an acceptable between meal supplement for a first grader: milk, cheese and saltine crackers.

Multiple Choice and Short Answer:

9. Circle the required components of a school lunch:

A. main dish with 2 or 3 ounces of meat or an alternate
B. butter or fortified margarine
C. fruits and vegetables
D. bread, pasta or rice
E. milk, lowfat
F. desserts

10. Circle the daily required components for a school breakfast for students age 6 to 12.

Milk | Juice or Fruit or vegetable | Cereal or bread | Butter or margarine | Eggs and bacon

11. The menu is the key to the entire foodservice operation because it influences many other requirements. List at least four functions of foodservice determined by the menu.

A.

B.

C.

D.

12. Complete the sentence. The major purpose of the school lunch program is to ....(2 pts)

13. The School Menu Pattern is a _____ to implement a U.S. nutrient standard.

A. plan B. project C. method

14. Plan an acceptable school lunch for an elementary school (ages 6 to 11) for 1 week.

Monday _____ (5 points)

_____

_____

_____

_____

_____

Tuesday _____ (5 points)

_____

_____

_____

_____

_____

Wednesday _____ (5 points)

_____

_____

_____

_____

_____

Thursday _____ (5 points)

_____

_____

_____

_____

_____

Friday _____ (5 points)

_____

_____

_____

_____

15. Using the "offer versus serve" menu format, create 6 acceptable reimbursable menu combinations from the menu below. (2 points each)

Meat Loaf
Whipped Potatoes
Mixed vegetables, Applesauce
Roll, Margarine
Milk

1. 4.

2. 5.

3. 6.

16. Put a number beside the following steps in writing menus to indicate the proper planning order.

_____ Decide on appropriate bread items to serve

_____ Include milk as a beverage

_____ Choose vegetables and/or fruits

_____ Select a meat or meat alternate

_____ Add a dessert or other foods as needed

17. The calorie requirements for a 19 year old male are _____ calories per day.

True and False

T F 18. An 11 year old boy requires 1000 more calories per day than a girl the same age.

T F 19. A six year old child needs 1/2 the amount of vitamin A that a 12 year old child does.

T F 20. A 16 year old girl requires more calcium than a 20 year old girl.

T F 21. A 19 year old girl requires more iron than a 19 year old boy.

T F 22. When a 16 year old girl gets pregnant, she requires 200 more R.E. of vitamin A per day.

Fill in the Blank:

23. List two nutrients often low in school lunch menus, and three foods that provide that nutrient.

A. Sources: 1) 2) 3)

B. Sources: 1) 2) 3)

Possible Score 78

Number Missed _____

Your Score _____

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Lesson 4

Answer Key for Progress Test I - Menu Planning

1. False - both are slurry (gravy type) products made in a similar fashion.
2. False - 2 to 4 weeks in advance.
3. False - The RDA is a list of foods required each day. It is a nutrient standard to follow in planning balanced menus.
4. False - All foods are long and narrow in shape. How would you change this menu to avoid this problem?
5. True
6. False - Breakfast should provide 1/4 of the RDA.
7. False - a bread product must be included.
8. True
9. Answers A, C, D. E.
10. Milk, juice or fruit or vegetable, cereal or bread
11. a. provides a variety of nutritious foods
    b. brings high participation if acceptable to customers
    c. determines what foods to purchase
    d. determines the use of USDA-donated foods
    e. reflects skills of personnel and determines staffing levels
    f. utilizes available equipment
    g. reflects cost controls as dictated by the budget.
12. Improve the health and well-being of children.
13. Answer A (plan).
14. (Instructor must check these individually.)
15. Any combination of 3 food items is acceptable as long as they come from the different required food groups (or components).
16. The correct order is 3, 4, 2, 1, 5.
17. 2900 calories per day.
18. False - a boy (of 11 years) requires 2700 calories, a girl 2200.
19. True - (500 and 1000).
20. True - 16 year old girls require 1200 mg and 20 year old girls only 800 mg.
21. True - girl requires 18 mg, a boy 10 mg.
22. True - an additional 200 more of Vitamin A per day is required.
23. Any of the following are correct answers:

    Vitamin A - from eggs, liver, milk, cheese, dairy products

    Vitamin C - from citrus fruits, cantaloupe, broccoli, tomatoes, green peppers, cabbage

    Iron - from green leafy vegetables, eggs, liver, meats, cereals

Lesson 5

TYPES OF MENUS

A. Goal of this lesson

The goal of this lesson is to understand and write menus that are: cycle, no-choice, alternate choice and choice.

B. Purpose of this lesson

After completing this lesson, the participants should be able to:

1. Design a 4 week cycle menu with a no-choice format.
2. Design an alternate choice menu for 1 week (with alternates being offered for fruits, vegetables and desserts) using the first week of the cycle menu you designed above as a base.
3. Design a choice menu for 1 week using the one week alternate choice menu you designed above as a base.

C. Instructor preparation for class activities

1. Duplicate sufficient copies of handouts.

D. Key words used in this lesson

Cycle Menu: A set of menus planned to be rotated over a specified time period.

No-Choice Menu: A menu with only one selection (food item) offered for each required food group (component).

Choice Menu: A menu which offers more than one variety of food item for required food groups (component).

Alternate Choice Menu: This menu allows some choices in the meal pattern, usually for vegetables, salads or desserts.

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E. References for additional information

1. Cronan, M. The School Lunch. Charles A. Bennett Company, Inc. Peoria, IL 1962. Out of print, available in many libraries.

2. Food and Nutrition Service. A Menu Planning Guide for School Food Service. USDA. PA #1260. 1980. See reference list, lesson 1.

3. Van Egmond-Parnell, D. School Foodservice. Second Edition. AVI Publishing Company, Westport, CT. 1981.

LESSON 5: TYPES OF MENUS

LESSON CONTENT	CLASS ACTIVITY
A. Menu Types	
1. No-Choice or Set Menus	
a. This menu meets all meal requirements.	
b. This menu offers no choice to customers.	
2. Alternate Choice	
a. This menu allows some choices in the meal pattern.	
For example:	
Meat Loaf (no choice) Tater Tots (no choice) Broccoli or Stewed Tomatoes (choose one) Bread and Butter (no choice) Applesauce or Fresh Banana (choose one) Whole or Lowfat Milk (choose one)	The one week menu written by each participant in Lesson 3 used the no-choice or set menu format. No choices were offered on the menu. Using that menu as a base, expand this menu, creating an alternate choice menu. Choices should be developed for Fruits, Vegetables and desserts. Use HANDOUT #5-1 for this assignment. Bring the completed alternate choice menu to the next lesson.
b. Precautions for alternative choice menus:	
(1) Be sure to include foods required in the school meal pattern.	
(2) Have choices of similar nutritional value.	
3. Choice Menus	
a. This menu allows choices in <u>all</u> menu components. Two or more choices for each food item are offered to customers.	
For example:	
Meat Loaf or Hot Turkey Sandwich (choose one) Tater Tots or Whipped Potatoes Broccoli or Stewed Tomatoes (choose two) Applesauce or Fresh Banana Whole or Skim Milk (choose one) Bread or Muffin (choose one)	Using the alternate choice menu created above, expand this menu into a total choice menu where choices are offered for all menu components. Use HANDOUT #5-2 for this assignment. Bring the completed choice menu to the next lesson. (HANDOUT #5-3, <u>Sample List of Main Dishes or Entrees</u>, may give you some new ideas for menu items.)

LESSON 5: TYPES OF MENUS

LESSON CONTENT	CLASS ACTIVITY
b. Note: Choice menus differ from "offer vs. serve" in that when choice menus are offered, customers must select 5 appropriate foods from those offered so as to fulfill the meal requirements. With "offer vs. serve" a minimum of 3 foods may be selected from those offered.	
B. Cycle Menus	
1. A cycle menu is a set of menus carefully planned to be rotated over a specified time period.	
2. The advantages of a cycle menu include:	Discuss these advantages of cycle menus and offer specific examples illustrating each advantage.
a. food and labor costs can be forecasted	
b. more effective purchasing is possible	
c. production scheduling is more efficient	
d. menu planner is freed from routinely re-writing menus.	
3. Cycle menus can be various lengths and can be used for various periods of time.	
a. Six week cycles are probably the most common.	
b. Four week cycles are also frequently used.	
c. A six week cycle repeated twice gives 12 weeks of menus. A four week cycle repeated three times gives 12 weeks of menus.	
d. Using a 12 week format for each kind of cycle offers a 12 week spring cycle. Each of the cycles can then have appropriate seasonal foods included.	
e. Cycles longer than 6 weeks defeat the purpose and advantages of cycle menus.	

LESSON CONTENT	CLASS ACTIVITY

f. Cycles of less than 3 weeks are monotonous.

g. Odd number cycles have also been used successfully so that foods do not fall on the same day of the week when the cycle repeats. An example of a 21 day cycle follows:

21 Day Cycle

Monday	Tuesday	Wednesday	Thursday	Friday
Day 1	Day 2	Day 3	Day 4	Day 5
Day 6	Day 7	Day 8	Day 9	Day 10
Day 11	Day 12	Day 13	Day 14	Day 15
Day 16	Day 17	Day 18	Day 19	Day 20
Day 21	Day 1	Day 2	Day 3	Day 4

Day #1 of the first cycle run falls on a Monday, but when Day #1 would repeat for its second run, it falls on a Tuesday. This eliminates comments from customers like "it's the second Tuesday, must be spaghetti day!"

h. There are two main types of cycle menus:

(1) Main dish cycle menus -
This type of cycle only includes the main dish. Closer to preparation time accompanying items are added based on the season of the year, the commodities available and prices of items that week. With this type of cycle you may wish to make a list of vegetables and fruits and desserts to rotate with the main dish cycle prepared.

(2) Complete cycle menu -
With this type of cycle every menu item is included and specified. However, general menu terms can be incorporated here such as "muffin". The kind of muffin can be determined a few days prior to service. Indicating only pears on the cycle menu can allow the menu planner to determine whether to use fresh or canned a few days prior to the actual day of service when market availability and price can be considered.

LESSON CONTENT	CLASS ACTIVITY

4. How to Plan Menus for Several Weeks at a Time . . . a Cycle Menu

   a. As mentioned in Lesson 3, the thoughtful planning of menus for several weeks at one time helps assure a good variety of foods, increases use of USDA donated foods, offers economy in buying, and effectively uses facilities, and employees' skills. A period of 4 weeks is frequently chosen by menu planners as a convenient length of time to plan a set of menus. This 4 week menu may then become a cycle after it has been tried and revised after actual use.

   b. The same order is followed in writing a cycle menu, as is used in writing daily or weekly menus.

      (1) Step 1 - Select a Meat or Meat Alternate for the entire period, for each day. Thus in a 4 week cycle on a no-choice menu, a total of 20 entrees would be selected. If the choice menu format was being used, 40 entrees would be selected.

         (a) Remember if a meat or meat alternate is repeated during the 4 week period, vary the vegetables and fruits and breads served with that item.

         (b) Follow a plan for providing a good variety of meat and meat alternates for entree or main dishes. For example, in a 4 week no-choice menu period, plan to meet the protein requirement by serving:

            Meat - alone or supplemented with cheese or peanut butter, 6 to 8 times (2-3 times/week)

            Poultry, fish or cheese - alone or supplemented with eggs or peanut butter, 6 to 8 times (2-3 times/week)

            Dry Beans or Peas - combined with meat or cheese, 4 times (once/week)

            Other meat or alternates, or any combination of meat or alternate foods, 2 times (once every 2 weeks)

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LESSON CONTENT	CLASS ACTIVITY
(2) Step 2 - Choose the Vegetables and Fruits including 2 or more servings per meal. As mentioned before, remember to include vegetables and fruits that are sources of: Vitamin A - - - - - - - - at least twice a week Vitamin C - - - - - - - - 2 or 3 times per week Iron - - - - - - - - - - as frequently as possible (Review HANDOUT #3-2 for sources of these nutrients)	
(3) Step 3 - Select a Variety of Bread or Alternates for each meal remembering that the proper portion of bread or an alternate must be served with each meal.	Using the original 1 week menu from Lesson 3 as a base, create a 4 week no-choice menu using the form on HANDOUT #5-4. Entree ideas for the menu may be selected from the list of foods on HANDOUT #5-3. Bring the completed menu to the next lesson. Follow the 5 step procedure for cycle menu planning from this lesson in completing this assignment.
(4) Step 4 - Include Milk remembering that lowfat milk must be offered and that one of those offered must be unflavored fluid lowfat, or skim, or buttermilk.	
(5) Step 5 - Include a Dessert or Other Foods as Needed to complete each meal. This may include sauces, relishes, garnishes or condiments which will make the entire meal more complete and attractive.	
5. The following precautions should be considered when planning cycle menus:	
a. Remember to plan for different seasons of the year.	
b. Allow flexibility to use in-season, commodity and specially priced foods that may be available. For example, a cycle menu entree may read "fresh fruit" or "diced poultry". The menu writer than has the flexibility to use any good fresh fruit on the market that week. The actual recipe used for the diced poultry can be selected based on customer likes, and also on accompaniments available to go with the entree.	

LESSON CONTENT	CLASS ACTIVITY
If Cranberry sauce was a "special" from a purveyor, the diced turkey could be used in a cream gravy over a biscuit with cranberry sauce as an accompaniment. If an oriental special was to be offered, the diced poultry might be used in a chow mein or chop suey.	
c. When planning cycle menus check items at the beginning and end of the cycle to make sure they are not repeating too close together. For example, the last day of one cycle might include corn dogs; the second day of the next cycle might also be a hot dog dish so within three days hot dogs would be served twice.	Using the checklist on HANDOUT #5-5 ask participants to evaluate the variety and frequency of menu items on the 4 week cycle menu they created. Discuss the improvements that participants would make in the menus after doing this evaluation.
d. Check cycle menus with a frequency check list to assure that enough variety is included in the menus. (See HANDOUT #5-5.)	

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HANDOUT #5-1

ALTERNATE CHOICE MENU ASSIGNMENT

Write an alternate choice menu for one week using the first week of your cycle menu as a base. Develop alternate items for vegetables, fruits or dessert items only. Bring the completed menu to the next lesson.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Entree (Protein) #1					
Bread, Pasta, Rice #1					
Vegetable, Fruit #1					
Vegetable, Fruit #2					
Vegetable, Fruit #1					
Vegetable, Fruit #2					
Dessert, Other #1					
Dessert, Other #2					

HANDOUT #5-2

TOTAL CHOICE MENU ASSIGNMENT

Write a choice menu for one week using your one week alternate choice menu as a base. Bring completed menu to next lesson.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Entree (Protein) #1					
Entree (Protein) #2					
Bread, Pasta, Rice #1					
Bread, Pasta, Rice #2					
Vegetable, Fruit #1					
Vegetable, Fruit #2					
Vegetable, Fruit #1					
Vegetable, Fruit #2					
Dessert, Other #1					
Dessert, Other #2					

HANDOUT #5-3

SAMPLE LIST OF MAIN DISHES OR ENTREES

Ground Beef Base

Meat Loaf
  with Tomato Sauce
  with Beef Gravy
Spaghetti/Meat Balls*
Lasagna
Hamburgers*
Hamburger Macaroni Hot Dish
  with Tomato Sauce Base
  with Cheese Base
Hamburger Pizza*
Meat Balls
  with Beef Gravy
  with Sweet/Sour Sauce
Chili
Hamburger Steak
Hamburger-Rice Hot Dish

Beef Base

Roast Beef*
Beef Stew
Swiss Steak
Beef and Noodles
Beef Vegetable Soup
Baked Steak
Beef B-B-Q*

Pork Base

Braised Chops
Pork B-B-Q
Sweet 'n Sour Pork
Pork Chops
  with Rice and Tomato Sauce

Poultry Base

Fried Chicken*
Chicken Fricassee/Biscuits
Chicken and Noodles
Turkey Sandwiches
Tetrazini
Creamed Turkey over Cornbread

Other

Fried Fish and Chips*
Tuna Noodle
Salmon Patties
Sauteed Liver
Hot Dogs
Corn Dogs*
Chili and Cheese Dogs
Fishburgers
Hot Beef, Pork, or Poultry Sandwich
Macaroni and Cheese
Cheese Fondue or Souffle
Cheese Omelet
Pizza Burgers*
Grilled Cheese Sandwiches

*Popular item with students which may be repeated within a cycle.

HANDOUT #5-4

CYCLE MENU WORKSHEET

Write a cycle menu using the form below. Bring the completed menu to the next lesson.

		MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Week 1	Entree (Protein)					
	Bread					
	Vegetable/Fruit					
	Vegetable/Fruit					
	Other					
Week 2	Entree (Protein)					
	Bread					
	Vegetable/Fruit					
	Vegetable/Fruit					
	Other					
Week 3	Entree (Protein)					
	Bread					
	Vegetable/Fruit					
	Vegetable/Fruit					
	Other					
Week 4	Entree (Protein)					
	Bread					
	Vegetable/Fruit					
	Vegetable/Fruit					
	Other					

HANDOUT #5-5

FREQUENCY CHECK LIST FOR MEAT AND MEAT ALTERNATES

	Week 1					Week 2					Week 3					Week 4				
	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F
Ground Beef Base																				
Meat Loaf																				
Spaghetti																				
Lasagna																				
Hamburger																				
Hamburger B-B-Q																				
Hamburger Macaroni, Hot Dish																				
Pizza																				
Meat Balls																				
Chili																				
Hamburger Steak																				
Hamburger Rice, Hot Dish																				
Other																				
Beef Base																				
Roast Beef																				
Beef Stew																				
Swiss Steak																				
Beef and Noodles																				
Beef Vegetable Soup																				
Baked Steak																				
Beef B-B-Q																				
Pork Base																				
Braised Chops																				
Pork B-B-Q																				
Sweet/Sour Pork																				
Pork Chops Baked with Rice and Tomato Sauce																				
Poultry Base																				
Fried Chicken																				
Chicken Fricassee																				
Chicken and Noodles																				
Turkey Sandwiches																				
Tetrazini																				
Creamed Turkey over Cornbread																				

Lesson 6

FOOD PREFERENCES OF CUSTOMERS

A. Goal of this lesson

The goal of this lesson is to explain the importance of using customer food preferences when planning menus.

B. Purpose of this lesson

After completing this lesson, the participants should be able to:

1. Describe and apply the food preferences to be considered in planning menus for children and senior citizens.
2. List four of the five palatability factors which should be considered in menu planning.
3. Explain two ways to introduce new or unusual foods to encourage maximum acceptance.

C. Instructor preparation for class activities

1. Ten week in advance, locate the film strips:
   a) "Food for Older Folks" (Canon Media, P.O. Box 1616, Wheaton, IL 60187 - phone 312-653-1616, purchase only $16.50, 1980 price)
   b) "The Art of Getting Kids to Eat" (Chiquita Brands, Inc. 15 Mercedes Dr., Montvale, N.J. 07465, Phone 201-391-9200)
   c) "Food Preferences for Different Age Groups" Nutrition Know How Inc., 48075 Colony Farm Circle, Plymouth, MI 48170, phone 313-455-0530 (One film strip in a kit of 4 called "Type A Menu Success Story" - Purchase $89.00, 1980 price) Contact local ISD office or state library in Lansing for possible loan.
2. Duplicate sufficient copies of handouts and copies of one week's menu to use for the activity listed on page 91 .
3. Gather cookbooks and other resources with pictures to illustrate the ethnic foods and food combinations discussed in this lesson. (The Time Life International Series of books is good). If time and money permit, have slides made of some examples to simplify viewing for participants.

4. Select and invite a student panel to discuss current "in foods" for their various age groups.
5. If planning to do the portion of this lesson dealing with senior citizens, locate an up-to-date poster of the Daily Food Guide or Your Diet Your Health poster, page 89*.
6. Duplicate copies of old school menus for page 96 .

D. Key words used in this lesson

PALATABILITY: Overall appearance and quality of foods.

E. References for additional information

(Starred references are considered most helpful and are available upon request from the Michigan Dept. of Education).

1. Cronan, M. The School Lunch. Charles A. Bennett Company, Inc., Peoria, IL 1962.
2. Extension Service. Food and Nutrition--Supplemental Lessons for Training Extension Aides: Meal Planning. USDA. U.S. Government Printing Office. Washington, DC 1971.
3. Food and Nutrition Service. A Menu Planning Guide for School Food Service. Program Aid No. 1260. USDA. U.S. Government Printing Office. Washington, DC, 1980.
4. Foods of the World. Time-Life Books. Chicago, IL 1969.
5. Kinder, F. and Green, N. Meal Management. MacMillan Co., New York, NY 1979.
6. McWilliams, M. Nutrition for the Growing Years. Wiley and Sons, Inc. 197 .
7. Food and Nutrition Service. A Planning Guide for Food Service In Child Care Centers. FNS-64. USDA, U.S. Government Printing Office, Washington, DC 1980.
8. Agricultural Research Service. Food Guide for Older Folks. Home and Garden Bulletin No. 17, USDA. U.S. Government Printing Office, Washington, DC, 1974. Stock No. 001-000-03321-2.
9. Dairy Council of Michigan. Daily Food Guide Poster.

*10. Food and Nutrition Service. Your Diet Your Health Poster. Program Aid 1240. USDA, Sept. 1979.

LESSON 6: FOOD PREFERENCES OF CUSTOMERS

LESSON CONTENT	CLASS ACTIVITY
A. Customers' food preferences must be considered when planning school menus.	As an introduction, show film "The Art of Getting Kids to Eat" from Chiquita Banana Inc. Discuss one thing new each person learned from the film.
1. If students do not like the food prepared they will not eat it. If they do not eat the food prepared, the students will not obtain the nutrients they need to grow and to function daily.	
2. We should think about menu items the same way students think about them:	
a. palatability factors are things which our senses enjoy. This includes the appearance and overall quality of foods:	List the 9 palatability factors on the board. As a class, give examples of each trait in a positive and negative situation. For example, if portions are too big, what is the result? Give examples of good color combinations on a plate, and examples where poor color combinations exist. Continue with the other 9 factors listed.
(1) the appearance of foods includes: (a) quantity or portion (b) color (c) neatness on plate (d) arrangement on plate (e) overall form	
(2) the quality of foods includes: (a) odor (b) temperature (c) texture (crisp, firm, smooth, chunky) (d) flavor	
b. vary food combinations. Do not serve:	
(1) the same food on the same day of the week (such as fish every Friday)	
(2) the same food combinations each time an entree appears (such as fish sticks and tater tots). However, there may be generally accepted combinations that are exceptions to this rule such as turkey and dressing.	Discuss food combinations that are generally accepted by children in your school. List them on the board.

LESSON CONTENT	CLASS ACTIVITY
(3) the same food twice in any one meal (such as apple salad and apple crisp). c. vary the cooking method for the same food such as roast turkey one time and turkey a la king the next time turkey appears on the menu. d. consider the season of the year and the weather. Certain foods are good in warm weather and some in cold weather. B. Students of different ages prefer different kinds of foods. 1. Preschool and kindergarten children prefer foods that: a. are soft, smooth, or crisp; they do not have enough teeth to enjoy chewy foods, neither do they like gummy or lumpy foods. b. are lukewarm, rather than very hot or very cold. c. can be picked up (finger foods are good). d. have been only slightly seasoned or salted. e. are in combinations with several foods of mild flavor and only one of pronounced flavor. f. have distinct, separate components (rather than stews and other one-dish meals). 2. Pre-school and elementary school students generally eat quite well and enjoy a variety of foods if exposed to them. a. They enjoy foods with a wide variety of flavors, textures, temperatures, shapes and sizes. b. Elementary school age is the time to begin introducing a variety of foods. c. Children enjoy learning about foods from other countries and occasional well-planned, positively introduced special meals help build menu variety. d. Elementary children begin to be independent and start choosing their own snacks. Education at this time should	Distribue HANDOUT #6-1 and allow 15 minutes for participants to complete the exercise to correct menus for variety. Discuss answers together and grade own papers. Leave corrected papers for instructor to review. Discuss as a group the various food items that are thought of as popular during a particular season of the year. List them on the board. Show film "Food Preferences for Different Age Groups". Ask each participant to identify at least one new thing they learned from the film. Discuss these together after the film.

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LESSON CONTENT	CLASS ACTIVITY
enccurage nutritious snacks rather than empty calorie ones. e. Elementary school children still enjoy finger foods and prefer foods with separate distinct parts rather than stews and one-dish meals. 3. Menus for adolescents should have these desirable characteristics: a. food choices should be included, if possible, but choices should be equal in nutritional value except for calories. b. the most poorly nourished group of American youth is teenage girls. In an effort to maintain a slim, trim figure, teenage girls will often skip lunch entirely if low calorie items are not available. c. serving size variables should be allowed since many secondary boys have hearty appetites and higher nutrient needs than younger children or girls.	
C. When the foodservice introduces new or unusual foods there are several techniques that will encourage maximum acceptability. 1. Introduce new or unusual foods one at a time and in small amounts. 2. Have the new or unusual food as an accompaniment to a popular food or in combination with a menu that is popular. 3. Do not mix the new or unusual food into a previously-liked combination dish. 4. Plan the new or unusual food into a special meal, such as a holiday menu.	You have decided to introduce the following foods to a school serving high school age children. Break into groups of 4 to 6 people and discuss ways you might try to introduce these new foods to get maximum customer acceptance. Have each group report on the methods they would use and ask for other suggestions from the other participants. Foods to be introduced are: 1. Eggs foo yong 2. German knockwurst 3. Reuben sandwich 4. Corn grits 5. Mushroom quiche

LESSON CONTENT	CLASS ACTIVITY
5. Plan the food into a cultural meal. Be sure the classroom teacher and the school foodservice have worked together to build positive attitudes toward this new experience.	
6. Plan new or unusual foods as special foods in honor of school activities (for example, first football game or a scholarship winner).	
D. Cultural and ethnic requirements may influence food preferences.	Distribute Handout #6-2, "Match Foods With Culture". Show pictures of various foods when possible to clarify unfamiliar foods. Working in pairs ask participants to complete this exercise. Discuss answers together in class.
1. Different geographic regions of the country have different traditional food and menu combinations.	
2. Religious beliefs may prohibit some children from eating specific foods or certain combinations of foods.	
3. Cultural background, due to race or nationality, plays a role in determining food preferences.	
E. Food preferences change, so include foods in the menu which are currently "in". However, some food fads are nutritiounally better than others.	
1. For example, the current popularity of Chinese cooking should be encouraged. Chinese cooking retains almost all the nutritional value and emphasizes the use of vegetables.	
2. Pizza is nutritious and calorie-laden.	
F. A person has a better chance of being well-nourished if a variety of food is eaten.	Invite a group of students of different ages to serve as a panel to discuss their food preferences, and those of their friends. List on the chalk board by age group.
1. Food habits can be modified and developed best when a child is young.	
2. The earlier a child learns to eat many types of food, the more liklihood there is that a person will be well-nourished throughout life.	

LESSON CONTENT	CLASS ACTIVITY
G. Feeding Senior Citizens (Include this section if your district has elderly feeding programs operating). 1. In 1970 there were more than 20 million senior citizens age 65 or more, or 10% of the total population in the United States. A century ago only 2.5% of the nation's people were 65 or older. This increase in the numbers of older people are the result of: a. many discoveries and advances in the medical and nutritional fields that allow people to live longer. b. improved living conditions. c. greater availability of health services. 2. Adequate nutrition for senior citizens in an achievable goal if social, psychological and physical influences do not interfere with the nutritional process. a. Social-psychological factors may include loneliness due to the loss of a spouse or close friends. Retirement may bring a loss in social status, with little reason for living. Reduced incomes bring economic pressure and may require a lower standard of living than was experienced before. This often includes buying different foods and sometimes less nutritional items. b. Physiological factors that change with the elderly include: (1) decreased saliva flow which may make foods less palatable with greater difficulty in swallowing. (2) decreased quantities of digestive enzymes secreted making digestion more difficult, especially foods high in fats. (3) a slowing of body processes with an accompanying decrease in basal metabolic rate which then may reduce total caloric requirements.	As a general introduction to this topic, show the film strip "Food For Older Folks". Afterwards list on the board the various ideas presented in the film that would help an elderly person provide good nutrition for him/her self. While you have the film, consider showing it to your elderly customers in the cafeteria after lunch some day. Lead a discussion after the film on new ideas learned from the film that they think will help them in improving their own eating habits and patterns, such as inviting a neighbor over so as not to eat alone. Discuss elderly people known to participants and how they have dealt with "growing old", use first names or assumed names. How can counter service personnel help these elderly customers to make their meal at school more enjoyable and a pleasant experience?

LESSON CONTENT	CLASS ACTIVITY
(4) development of osteoporsis (reduced bone mass) a disease frequently found in elderly women whose diets have been low in calcium, phosphorus and Vitamin D. (5) loss of teeth or use of improper fitting dentures may limit food choices of the elderly. (6) general mobility may be decreased for an elderly person and a walker or cane may be required. Help in carrying a tray of food for such a person would be required. (7) general confusion, especially to a new situation, is possible among the elderly. The variety of foods offered on a cafeteria line may also be a confusing experience. Counter service personnel should be alert to this and offer assistance when possible.	
H. Daily Dietary Recommendations for Senior Citizens.	
1. Fruits and vegetables - The recommendations for 4 or more servings from this group with at least one serving of a citrus fruit daily, and a good source of Vitamin A every other day has been shown to be lacking from the eating patterns of many elderly people. Studies show that Vitamin A and ascorbic acid (Vitamin C) are frequently missing from the diets of older persons so should have special emphasis in all elderly feeding programs.	Post a large poster of the Daily Food Guide and review the foods from each group as related to the requirements of the elderly person.
2. Bread and Cereals - 4 servings from this group are likely to be consumed by elderly persons because these foods are easy to eat and are relatively low in cost.	On the chalk board review the food sources of Vitamin A and C and suggest cooking methods that would make these foods appealing to elderly customers. Consider the chewing capabilities and the digestive ability of these persons.
3. Dairy Group - The need for calcium and phosphorus remains the same with 2 glasses of milk required daily to maintain the integrity of bones. Milk or a good source of calcium and Vitamin D is frequently found deficient in the diets of elderly persons so should be emphasized for all senior citizens.	

LESSON CONTENT	CLASS ACTIVITY

4. Meat and Meat Alternates - The need for protein also remains the same as was consumed earlier in life. A minimum of 2 servings from the meat or meal alternate group of foods is required daily.

5. Liquids are important in the diet of the elderly if constipation is to be avoided. At least 6 to 8 glasses of liquid are recommended daily which can be in the form of soups or bouillon, coffee, tea, fruit or vegetable juice.

6. Fiber (or roughage) sources come from whole grain breads and cereals and roughage from the skins of fruits and vegetables. They are also important in preventing constipation and encouraging regularity.

7. Calorie requirements for the elderly are 10%-24% lower than for younger adults due to the decrease in the basal metabolic rate and a decrease in general body activities. There should be an effort made to avoid foods high in calories such as dessert items unless they fulfill one of the food group requirements listed above. Most nutrient needs stay about the same for senior citizens with this one exception - decreased calories.

I. Current legislation in the form of Title III.C. C-1, Congregate Meals, and III.C-2, Home Delivered Meals of the Older American's Act of 1965, states the following meal pattern requirements for Senior Citizens. Just as the school meals programs have a pattern to follow to obtain money for the program so does the senior citizen program.

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Meat or Alternate	- 3 oz cooked
Vegetables & Fruits	- Two 1/2 cup servings
Enriched Bread/Alternate	- one slice or serving
Butter or margarine	- 1 tsp (1 pat)
Dessert	- 1/2 cup
Milk	- 1/2 pint
Optional beverages	- as desired

Duplicate copies of an old school menu for a week (or use one of the cycle menus written in lesson 5) and review each as if your were a senior citizen.

1. What changes might be needed in order to conform to the required meal pattern of Title III?
2. What changes might you make to the menu to make them more attractive to elderly customers?
3. When foods are changed for this audience, will they still be appealing to your student customers?
4. What new ideas can you suggest that you know are popular with elderly persons? Can they be adapted to the menu at your school?

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HANDOUT #6-1

MEALS NEED VARIETY

Correct these menus to avoid: 1) the same foods on the same day each week, 2) the same foods together in any meal, 3) the same food twice in any meal, and 4) food prepared or served the same way.

	WEEK 1	WEEK 2	WEEK 3
MONDAY	MENU #1 Hot turkey on Bun Spanish Green Beans Chilled Peaches Peanut Butter Cookie	MENU #6 Tomato Soup Grl. Cheese Sand. Lime Pear Gelatin Peanut Butter Cookie	MENU #11 Spaghetti w/meat Sc Spinach Apple Coleslaw Bread Sticks Applesauce
TUESDAY	MENU #2 Fish Sticks w/ Tartar Sauce Lettuce Salad Bread/Margarine Brownies	MENU #7 Fish Sticks w/ Tartar Sauce Lettuce Wedge Bread/Margarine Chocolate Pudding	MENU #12 Oven Baked Chicken Cheese Potatoes Pea & Cheese Salad Roll/Margarine Chilled Peaches
WEDNESDAY	MENU #3 Spaghetti w/Meat Sc Spinach Apple Coleslaw Bread Sticks Applesauce	MENU #8 Bk Ham w/Cherry Sc Tater Tots Green Beans Roll/Margarine Cherry Cake	MENU #13 Hot Turkey on Bun Spanish Green Beans Chilled Peaches Oatmeal Cookie
THURSDAY	MENU #4 Meat Loaf w/Gravy Whipped Potatoes Carrot Coins Roll/Margarine Choc. Chip Cake	MENU #9 Fish Square on Bun Fresh Veg. Relishes Orange Jc. Popsicle	MENU #14 Chicken Chop Suey Steamed Rice Fruited Gelatin Sugar Cookie
FRIDAY	MENU #5 V-8 Juice Grl. Cheese Sand Coleslaw Cherry Pie	MENU #10 Pizza w/Grd. Bf/Cheese Lettuce Salad Fruit Cup Choc. Chip Cookie	MENU #15 Pizza w/Grd. Bf/Cheese Pineapple Coleslaw Apple Brownie

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ANSWER KEY FOR HANDOUT #6-1

MEALS NEED VARIETY ANSWER KEY

Below are typical examples of the kinds of errors in this 3 week menu. How many more can you identify?

Menu 1 is repeated with only one modification on Menu 13.

Menu 3 has apples twice and is repeated exactly in Menu 11.

Menu 3 has spaghetti, spinach, coleslaw and bread sticks that are all long and skinny.

Menu 6 has same cookie as Menu 1.

Menu 2 has fish sticks and a similar menu to Menu 7.

Menu 8 has cherries twice.

Menu 12, 13 and 14 all have a poultry base.

Green beans and pears are each served very frequently and close together.

Dont' get into a rut and always serve fish sticks with a fried potato product or spaghetti with bread sticks.

ANSWER KEY FOR HANDOUT #6-2 MATCH FOODS WITH THE CULTURE

I.
1. a
2. b
3. a
4. b or d
5. b
6. e
7. b
8. c

II.
1. c
2. a
3. a and b
4. d and e

III.
1. c
2. e
3. b
4. f
5. h
6. a
7. d
8. g
9. j

HANDOUT #6-2

MATCH FOODS WITH THE CULTURE

I. Match the following foods with the correct section of the United States: (answers may be used more than once).

1. Baked Beans and Brown Bread	a. New England
2. Gumbo	b. South
3. Brown Shelled Eggs	c. Southwest
4. Fried Chicken	d. Midwest
5. Creole	e. Northwest
6. Salmon	
7. Key Lime Pie	
8. Chili	

II. Match the following food preferences with the specific religion: (answers may be used more than once).

1. No meat on Friday during Lent	a. Jewish
2. Unleavened Bread on given days	b. Lutheran
3. Pork not eaten	c. Catholic
4. Complete fast certain days	d. Moslem
	e. Hindu

III. Match the following foods with cultural origin:

1. Enchiladas	a. Pennsylvania Dutch
2. Lasagna	b. Black American
3. Soul Food	c. Mexican
4. Sauerbraten	d. Russian
5. Fried Rice	e. Italian
6. Shoo-Fly Pie	f. German
7. Borsch	g. Japanese
8. Sukiyaki	h. Chinese
9. Pierogi	i. French
	j. Polish

Lesson 7

MENU PLANNING AND UTILIZATION OF RESOURCES

A. Goal of this lesson

The goal of this lesson is to become familiar with the relationship between menu planning and the utilization or management of resources (such as labor, food and supplies, equipment).

B. Purpose of this lesson

After completing this lesson, the participants should be able to:

1. evaluate a menu for items that can be partially prepared in advance to ease daily work loads, and
2. evaluate a menu for "equipment overload" and suggest appropriate changes to correct the problem.

C. Instructor preparation for class activities

1. Make sure participants bring copies of their 1 week choice menu from Lesson 5 to this lesson.
2. Collect food labels from soy analogs, textured vegetable protein, page 105.
3. Obtain blackboard, chalk, erasers.

D. Key words used in this lesson

Biodegradable: compounds that can be broken down naturally by bacteria in soil or water.

Soy Analogs: processed food product made from soy beans which tastes like other natural foods such as beef flavored analogs. Used in combination with meats, fish and poultry.

Stock Rotation: involves dating of all foods and products received so stored foods can be rotated. This allows all foods and products to be used on a "First In - First Out" basis.

E. References for additional information

1. Cronan, M. The School Lunch. C.A. Bennett Co., Inc. Peoria, IL, 1962.
2. Eshbach, C. Food Service Trends. Cahners Publishing, Boston, MA, 1976.

3. Food and Nutrition Service. A Guide for Planning Food Service in Child Care Centers. (FNS-64). USDA, U.S. Government Printing Office, Washington, DC, 1980.

4. Kinder, F. and Green, N. Meal Management, Fourth Edition. MacMillan Co., New York, NY, 1979.

5. Van Egmond-Pannell, D. School Foodservice. Second Edition, AVI Publ. Co., Westport, CT, 1981.

LESSON CONTENT	CLASS ACTIVITY

A. In Lesson 1, the functions of a good menu and their relationship to a well run foodservice were listed. They were:

1. provides a variety of nutritious foods
2. bring high participation of customers if acceptable to them
3. determines what foods to purchase
4. determines the use of USDA donated foods (commodities)
5. reflects skills of personnel and determines staffing levels
6. utilizes available equipment
7. reflects cost controls as dictated by the budget.

B. The first of these, "Provides a variety of nutritious foods" was discussed in detail in Lesson 1 & 2 as the various required meal patterns were discussed and the Recommended Dietary Allowances were explained.

C. The second point, "Brings high participation if acceptable to customers" was explained in Lesson 6 when the food preferences of children and customers of various ages were discussed and reviewed.

D. The next point, "Determines what food to purchase" is discussed in detail in the School Food Service Training manual: Cost Control.

E. Point number 4, "Determines the use of USDA donated foods or commodities" is one that all school menu planners are concerned about. Types of commodities available vary from abundant to average amounts. This complicates the menu planners job especially when attempting to write cycle menus that will be used several months in the future.

F. The next function of a menu, "Reflects skills of personnel and determines staffing levels" is a very important issue.

1. The school menu planner should take advantage of the particular skills and interests of the kitchen staff. The employees should, however, inform the menu writer of particular skills and interests that they have.

LESSON CONTENT	CLASS ACTIVITY
For example, if a cook is interested in practicing cake decorating skills, having decorated cup-cakes on the menu for a holiday menu would add interest to the food line and the cook would enjoy this non-routine assignment.	
2. Plan the menus so that the work load of the employees is consistent within the day and from day to day. Some of the principles of good scheduling include: a. plan menus so that not all items will require last minute work, b. include some menu items that can be partially prepared the day before, c. do not overload one particular employee on any one day, and d. plan one fancy food item on a day with other simply prepared items.	Using the 1 week choice menu from Lesson #5, discuss which items on your menu could be partially prepared a day in advance to help ease the work load on any given day. Identify which menus are the "hard" ones which might require more in preparation steps.
G. The next function of the menu "Utilizes available equipment," it's the one that frustrates many menu planners because they desire to have more or newer equipment to make menu planning easier. 1. The menu must be planned to use existing equipment. Recipe modification rather than menu modification may allow preparation of certain food products with the equipment at hand. You may need to change preparation methods to utilize the existing equipment. 2. Select preparation methods that will utilize as many different pieces of existing equipment as possible. 3. Do not overload one piece of equipment while neglecting others. 4. Consider the equipment and space characteristics of the serving line. a. The serving counter must be adequate to handle the number of items on the menu. b. When planning menus, consider the numbers and kinds of serving tools and dishes needed to serve each menu item.	Using the same 1 week choice menu from Lesson 5, indicate the equipment used in the preparation of each menu item. Use the following code: Oven = O Steamer = S Steam Jacketed Kettle = K Deep Fat Fryer = F Mixer = M Range top = R Grill or Griddle = G Slicer = SL Mark the appropriate code letter beside each menu item. Some items may have 2 or more code letters. For example: Roast Turkey = SL, O This means that both the slicer and the oven are required to prepare this food item. After coding each menu item, determine if any day on the menu has overloaded any one piece of equipment. Suggest an appropriate menu change which would eliminate the equipment overload.

LESSON CONTENT	CLASS ACTIVITY
c. Select menu items to fit the type of plates and trays used. d. Select menu items that allow service that is fast enough to accomodate the required number of children in the allotted meal period. For example, a menu requiring dishing up turkey, dressing, whipped potatoes, gravy, and peas for each child's plate would be more time consuming than a menu with lasagna and green beans. If lunch periods are very limited due to crowded facilities, the first menu might not be practical to run. 5. Certain menu items may require special serving facilities or equipment to be effective. For example, a taco rack makes taco assembly much easier. A portable counter (chilled) to use for a salad bar in a high school would make such a menu item much more effective. H. The last function of a good menu is, "Reflects cost controls as dictated by the budget". 1. Food availability is a prime cost determinant. a. Purchase fresh foods in season. b. Lists of plentiful foods complete with menu ideas and recipes are useful in menu planning. c. Food availability depends upon the geographical location. 2. Maximum use should be made of USDA donated food items. 3. Check your food inventories and schedule the use of both USDA donated and locally purchased foods. 4. Balance the use of high and low cost food items within a given time period. 5. Use standardized recipes in the implementation of your menu plan. These recipes are tested so as to provide a given number of servings of a high quality product. Standardized recipes are discussed in detail in the manual on food production.	

LESSON CONTENT	CLASS ACTIVITY
6. Know how much you can spend for food during a given time period. Do not spend more than this amount. This can be determined by keeping a running record of food purchased week by week. I. The school foodservice plays a major role in ecology and preserving "our good earth". This is another way of saying: School foodservice personnel are concerned and interested in running an efficient operation. 1. School foodservice personnel have a big responsibility. They will help determine American food habits in the future by what is served in the schools today. School foodservice personnel can help prepare Americans for changes in the future food supply. For example, if textured vegetable proteins and soy analogs are going to be used more in the future, then their use and acceptance in a school meal program is vital to their acceptance by a general population in the future. 2. Correct use of equipment as indicated on the manufacturer's instructions or on standardized recipes will minimize energy expenditure, both of fossil fuels (such as coal, natural gas and oil) water and human energy. 3. Control of food waste is one way to help save our resources. a. Serve foods that students enjoy to reduce leftovers. b. Utilize leftovers promptly. Make notations on work sheets to show how to use leftovers. c. To avoid food spoilage, utilize proper food storage and stock rotation techniques. d. Plan to prepare the proper number of portions based on past usage records. This avoids unnecessary leftovers. e. Serve required portion sizes. Under portioning produces leftovers while over portioning increases costs.	Collect and share food labels or packages which contain a soy analog or a textured vegetable protein. Bring these to the next lesson to share with other participants.

LESSON 7: MENU PLANNING AND UTILIZATION OF RESOURCES

LESSON CONTENT	CLASS ACTIVITY
4. Correct choice and proper use of sanitizing and cleaning materials will help reduce pollution. a. Choose biodegradable soaps and detergents. b. Use only correct amounts of cleaning agents. c. Use approved waste disposal methods.	Discuss ways to conserve human and fossil energy, water and other resources. List ideas on the board.

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Lesson 8

PROGRESS TEST II

A. Goal of this lesson

The goal of this lesson is to review the most important aspects of the past 3 lessons by administering the following Progress Test.

B. Purpose of this lesson

After completing this lesson, the participants should be able to:

1. summarize and review the important information presented in Lesson 5, 6, and 7,
2. emphasize the most important points presented in Lesson 5, 6, and 7, and
3. identify subject areas in which participants desire or need further study and practice.

NOTE: The Progress Test should NOT raise apprehensions among participants or be used as a device to keep them from continuing on with further lessons. There is no minimum score of success. This is an exercise or learning activity just as the other lessons have been.

C. Instructor preparation for progress test

1. The time allowed for this lesson is approximately 25 minutes.
2. Duplicate sufficient copies of Progress Test.
3. How the Progress Test should be given:
   A. Pass out copies of the progress test to each participant.
   B. Provide pens or pencils for those who may not have brought their own.
   C. Explain that the reason for this Progress Test is to review the important information presented in the past three lessons.
   D. Briefly go through the test together to explain the different kinds of questions to be sure that all participants know what they need to do for each question.
   E. Allow approximately 25 minutes for participants to complete the test.
   F. Allow participants to keep their own test while answers are discussed.
   G. State aloud which answer(s) are correct for each question.
   H. Discuss how to change false statements so they read "true".

I. Lead a class discussion relating to reasons why other choices or answers, if given, are incorrect. Ask participants to give examples of the application of each question to their school foodservice situation.

J. Allow any participants who desire to do so to retake the test on their own time.

K. Provide additional references on any topic to participants who desire further information.

LESSON 8

PROGRESS TEST II (Covers Lesson 5, 6 and 7).

TRUE and FALSE Questions: Circle "T" if the statement is true, "F" if it is false.

T F 1. An alternate choice menu has a selection between certain items, often vegetables or fruits.

T F 2. Chili would probably be a good menu item to run in May or June.

T F 3. Four to 6 year old children usually like to eat soft, one dish casserole type meals.

T F 4. Cycle menus make it easier to forecast labor costs.

T F 5. The best length for a cycle menu is 10 weeks so customers do not tire of the same types of foods.

Fill in the Blank

6. Using a variety of preparation methods is important to avoid menu boredom. List 4 methods of preparing/serving pork (roast) that would be acceptable for a high school menu.

   A. _____

   B. _____

   C. _____

   D. _____

7. You would like to try egg rolls as a new ethnic food for a middle school. List 2 ideas on how classroom teachers could support this idea and help encourage its acceptance.
   (2 points each).

   1.

   2.

8. Find a minimum of 5 errors in this choice menu used at a high school. (There are a total of 8 main errors.)

   Tomato Soup

   Meat Loaf
   Cabbage Rolls

   Cut Green Beans
   Buttered Rice
   Mixed Vegetables

   Coleslaw
   Waldorf Salad

   Cornbread

   Apple Crisp

Matching

9. On the following menu, identify the various menu items by the following code. Some may have 2 answers.

PA=can be prepared in advance (day before)
HW=hand work at last minute
CP=complicated preparation procedure, not simple to make
APT=average preparation time required

A. _____ split pea soup
B. _____ homemade lasagna
C. _____ turkey club sandwich on toast
D. _____ whipped potatoes
E. _____ buttered carrot coins
F. _____ broccoli spears
G. _____ cherry gelatin with sliced bananas
H. _____ tossed green salad with cream dressing
I. _____ sliced hot garlic bread
J. _____ baked lemon custard
K. _____ homemade chocolate cake square

10. The following menus would overload which piece of kitchen equipment.

a. steamer b. oven c. kettles

Menu I - meat loaf
scalloped potatoes
spinach souffle
fruit salad with toasted nuts
homemade cherry pie

Answer I. _____

Menu II - chili macaroni
boiled green beans
cold potato salad
lime fruit gelatin
gingerbread w/lemon sauce

Answer II. _____

11. As foodservice employees we can help save our resources by: (select all correct answers)

a. using leftovers promptly to avoid spoilage.

b. cooking faster (turning ovens up, turning range on high heat).

c. prepare food quantities based on past usuage records.

d. practice proper food storage and stock rotation techniques.

12. Below indicate if each item is an advantage (mark with an "A") of a cycle menu or a precaution (mark with a "P") to remember when using cycle menus.

_____A. Allows flexibility by using terms such as "fresh fruit".
_____B. Allows for forecasting the food cost in advance.
_____C. Always check beginning and end of cycle for close repetition of items.
_____D. Plan different cycles for different seasons of the year.
_____E. Allows for more efficient scheduling of production assignments.
_____F. Menu planner doesn't have to write menus every week.

ANSWER KEY FOR PROGRESS TEST II - Manu Planning Lesson 5, 6, 7

1. True
2. False, would be a better menu item during the colder months of the year.
3. False, casserole type meals are generally not preferred by young children; they prefer foods served separately, and with crunchy textures.
4. True
5. False, 10 weeks is too long, 4 to 6 weeks are the most commonly used cycle lengths.
6. Some ideas may be: roast pork and dressing, BBQ pork on bun, chop suey or chow mein, hot pork sandwich. Instructor can use own judgment as to acceptable answers.
7. Ideas may include: (Instructor can use own judgment on appropriate answers here)
   a. Ask teachers to develop oriental unit which includes ethnic eating patterns.
   b. Ask local oriental restaurant operator to visit class and do a demonstration on making egg rolls.
   c. Take class on field trip to local oriental restaurant to visit the kitchen and watch the preparation of egg rolls.
   d. Have children actually follow a recipe and make egg rolls themselves.
   e. Ask art teachers to have their students make some posters about "egg roll day" in the cafeteria.
   f. Ask English classes to have their students do a "news release" advertising egg roll day in the cafeteria. Use news release in student newsletter or local paper.
   g. If there are any oriental families in the school, ask if mothers or fathers could dress in traditional oriental costumes on "egg roll day" and be guests during the lunch period. They could sit with groups of children and explain the egg roll recipe and its background.
   h. Ask music department to provide live or recorded oriental music in lunch room that day.
8. The 8 main errors are:
   a. ground beef and pork are in both entrees.
   b. green beans are on the menu twice (as vegetable and in mixed vegetables).
   c. corn is on twice (mixed vegetables and corn bread).
   d. cabbage is on twice (in slaw and cabbage rolls).
   e. rice is on twice (plain and in cabbage rolls).
   f. apples are on twice (in waldorf salad and in dessert).
   g. tomatoes on twice (in soup and sauce on cabbage rolls).
   h. mixed vegetables and rice have same shapes (small cut up pieces).

9.

A.	split pea soup	APT(PA)
B.	lasagna	CP, PA
C.	turkey club	HW, PA
D.	whipped potatoes	APT
E.	carrot coins	APT (PA if fresh)
F.	broccoli spears	APT or HW (small batch cooking close to service)
G.	banana gelatin	PA
H.	tossed salad	PA and some HW (dressing added close to service, or served on side)
I.	hot garlic bread	APT or HW (determined by preparation methods)
J.	lemon custard	APT
K.	cake square	APT

NOTE: There may be some disagreement on answers due to differences in production procedures followed by different cooks. The answers given here are general in nature.

10. Menu I, answer b (oven used for all 5 items on menu).

11. Menu II, answer c (kettle used for all 5 items on menu).

12. A. A

B. A

C. P

D. P

E. A

F. A

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